

From gumbear at pacbell.net Fri Feb 1 03:58:28 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Fri, 1 Feb 2013 00:58:28 -0800  
Subject: [BoatAnchors] paper caps failure  
References: <20130131224419.UMCUS.79120.root@cdptpa-web07-z01>  
Message-ID: <002701ce005c\$3a037760\$4301a8c0@KB6NAX>

> open paper caps a rarity? really? Arden, I will send you the next  
batch of open paper caps in my next  
restoration project. not trying to flame you, perhaps its the humidity  
in this part of the country?

I've found some wax and paper caps that are really rotten and open. Perhaps  
you are right, a high moisture environment eats the caps up.

Arden

From spr at earthlink.net Fri Feb 1 12:44:00 2013  
From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 01 Feb 2013 09:44:00 -0800  
Subject: [BoatAnchors] paper caps failure  
In-Reply-To: <002701ce005c\$3a037760\$4301a8c0@KB6NAX>  
References: <20130131224419.UMCUS.79120.root@cdptpa-web07-z01>  
<002701ce005c\$3a037760\$4301a8c0@KB6NAX>  
Message-ID: <510BFEE0.2020507@earthlink.net>

Hi Arden,

I've also see paper caps that were wired across the AC line and are now  
open, or what's left of them after the steam explosion has split them  
wide open--they're open in both senses!

Paper caps were a headache when they were new, but that was what the  
materials science of the times permitted.

Regards,

Scott

On 2/1/13 12:58 AM, Arden Allen wrote:

>> open paper caps a rarity? really? Arden, I will send you the next  
> batch of open paper caps in my next  
> restoration project. not trying to flame you, perhaps its the humidity  
> in this part of the country?  
>

> I've found some wax and paper caps that are really rotten and open. Perhaps  
> you are right, a high moisture environment eats the caps up.  
>  
> Arden  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From infomet at embarqmail.com Fri Feb 1 15:17:11 2013  
From: infomet at embarqmail.com (Wilson Lamb)  
Date: Fri, 1 Feb 2013 15:17:11 -0500  
Subject: [BoatAnchors] Paper Caps  
Message-ID: <0100F26B0F5A4449A72C60201E6BE959@WilsonPC>

I see remarkably few bad paper caps.  
The only open I remember was open because the lead had corroded off the foil.  
It fell out when I pulled on it.  
It seems that's about the only way one could be open, doesn't it?  
If the leads are connected to the foil, it's either going to be OK or leaky??  
Wilson  
W4BOH

From spr at earthlink.net Fri Feb 1 15:28:41 2013  
From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 01 Feb 2013 12:28:41 -0800  
Subject: [BoatAnchors] Paper Caps  
In-Reply-To: <0100F26B0F5A4449A72C60201E6BE959@WilsonPC>  
References: <0100F26B0F5A4449A72C60201E6BE959@WilsonPC>  
Message-ID: <510C2579.9040602@earthlink.net>

Hi Wilsonn,

Where do you live?

/scott

On 2/1/13 12:17 PM, Wilson Lamb wrote:

> I see remarkably few bad paper caps.  
> The only open I remember was open because the lead had corroded off the foil.  
> It fell out when I pulled on it.  
> It seems that's about the only way one could be open, doesn't it?  
> If the leads are connected to the foil, it's either going to be OK or leaky??  
> Wilson  
> W4BOH

> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From 1oldlens1 at ix.netcom.com Fri Feb 1 17:51:31 2013  
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)  
Date: Fri, 1 Feb 2013 14:51:31 -0800  
Subject: [BoatAnchors] paper caps failure  
References: <20130131224419.UMCUS.79120.root@cdptpa-web07-z01><002701ce005c\$3a037760\$4301a8c0@KB6NAX>  
<510BFEE0.2020507@earthlink.net>  
Message-ID: <38A378F6F4BA4753BA707C178F21E7EF@VALUED20606295>

----- Original Message -----  
From: "Scott Robinson" <spr at earthlink.net>  
Cc: "Old Tube Radios (new)"  
<boatanchors at minime.theporch.com>  
Sent: Friday, February 01, 2013 9:44 AM  
Subject: Re: [BoatAnchors] paper caps failure

> Hi Arden,  
>  
> I've also see paper caps that were wired across the AC  
> line and are now open, or what's left of them after the  
> steam explosion has split them wide open--they're open in  
> both senses!  
>  
> Paper caps were a headache when they were new, but that  
> was what the materials science of the times permitted.  
>  
> Regards,  
>  
> Scott

From everything I've read about paper caps the main cause of failure was degradation of the paper caused by its acid content and moisture getting in. I don't know what the specifications were for the paper, presumably its thickness and dielectric constant had to be fairly constant. I have some that was used at RCA as part of the process of making ribbons for ribbon microphones. Its smooth, brown paper. Capacitor manufacturers tried all sorts of techniques to seal the windings from moisture. Most of the very old caps

were impregnated with wax. The longest life caps were filled with mineral oil. The wax and oil also affect the dielectric constant somewhat. The bathtub paper caps in my recently rebuilt RCA AR-88 were filled with oil and failed because the oil leaked out. I don't know what happened to the seals but this receiver had a tough life after it was surplussed out.

RCA used capacitor paper to support the aluminum foil used to make ribbons for ribbon microphones and I have a small amount of it. I suspect the source of the ribbon aluminum was capacitor foil.

I wonder what special attention was paid to the paper for capacitors. Kodak built their own paper mills to make paper for photographic prints which require the paper to be free of many impurities, I just wonder if capacitor paper was made to such high standards.

I am not sure how a paper cap could fail open but evidently they occasionally do. The ones I have dissected had layers of paper and foil wound up in a cylinder, sometimes on a core, with the ends folded over and fastened in some way to the leads. I suspect it is the lead connection which fails.

An ad in a 1948 QST from the Condenser Products Company of Chicago advertises Plascon capacitors which it states are plastic film capacitors and are superior to paper capacitors. This company also made Glass-Mike caps. So, evidently plastic film caps go back a long way. I think these must have been too expensive for general use. Quite a few brands of capacitors used plastic coated paper, the notorious Black Beauty caps are an example. These were oil filled in molded plastic cases and it seems the seals were not very good so the oil leaked out early. There were many other brands of plastic and paper caps that did not fail early but all seem to eventually have the same problems of high leakage as regular wax impregnated paper caps. At any rate, far superior plastic film caps are available and will probably outlast us all.

The one virtue paper dielectric has is very low storage factor AKA dielectric absorption, which makes them good for timing caps and some other purposes.

--

Richard Knoppow

Los Angeles

WB6KBL

dickburk at ix.netcom.com

From gumbear at pacbell.net Sat Feb 2 00:39:28 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Fri, 1 Feb 2013 21:39:28 -0800  
Subject: [BoatAnchors] paper caps failure  
References: <20130131224419.UMCUS.79120.root@cdptpa-web07-z01><002701ce005c\$3a037760\$4301a8c0@KB6NAX><510BFEE0.2020507@earthlink.net>  
<38A378F6F4BA4753BA707C178F21E7EF@VALUED20606295>  
Message-ID: <000701ce0107\$b0d8a530\$4301a8c0@KB6NAX>

> .....The one virtue paper dielectric has is very low storage factor AKA dielectric absorption, which makes them good for timing caps and some other purposes.

Rich, can you provide corroboration of this statement? My understanding is that certain plastic films types, polypropylene being one, outperform paper in dielectric absorption. My own experience is paper caps make lousy timing elements.

Arden Allen  
KB6NAX

From spr at earthlink.net Sat Feb 2 01:33:02 2013  
From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 01 Feb 2013 22:33:02 -0800  
Subject: [BoatAnchors] paper caps failure  
In-Reply-To: <000701ce0107\$b0d8a530\$4301a8c0@KB6NAX>  
References: <20130131224419.UMCUS.79120.root@cdptpa-web07-z01><002701ce005c\$3a037760\$4301a8c0@KB6NAX><510BFEE0.2020507@earthlink.net>  
<38A378F6F4BA4753BA707C178F21E7EF@VALUED20606295>  
<000701ce0107\$b0d8a530\$4301a8c0@KB6NAX>  
Message-ID: <510CB31E.2050001@earthlink.net>

Folks,

I expect that Polystyrene caps are the champion at this...so long as you are careful with soldering temperatures and don't melt them!

/scott

On 2/1/13 9:39 PM, Arden Allen wrote:

>> .....The one virtue paper dielectric has is very low storage factor AKA dielectric absorption, which makes them good for timing caps and some other purposes.  
>

> Rich, can you provide corroboration of this statement? My understanding is  
> that certain plastic films types, polypropylene being one, outperform paper  
> in dielectric absorption. My own experience is paper caps make lousy timing  
> elements.

>

> Arden Allen

> KB6NAX

>

>

From navy.radio at gmail.com Sat Feb 2 16:32:24 2013

From: navy.radio at gmail.com (Nick England)

Date: Sat, 2 Feb 2013 16:32:24 -0500

Subject: [BoatAnchors] Richmond VA hamfest photos

Message-ID: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.gmail.com>

For your entertainment.

Photos at <http://www.virhistory.com/ham/rich-13.htm>

If you don't like to see photos of a hamfest you didn't attend, then  
please hit delete.

cheers,

Nick K4NYW

From gumbear at pacbell.net Sat Feb 2 16:36:29 2013

From: gumbear at pacbell.net (Arden Allen)

Date: Sat, 2 Feb 2013 13:36:29 -0800

Subject: [BoatAnchors] paper caps failure

Message-ID: <001d01ce018d\$5ea12a40\$4301a8c0@KB6NAX>

> ....I don't remember the source at the moment but think it  
may have been an old General Radio catalog that suggested  
paper rather than mica for very low frequencies where  
dielectric absorption is important.

Polystyrene is excellent for low dielectric absorption  
and was used by GR for laboratory caps, Polypropylene is  
likely another.

There is probably a chart giving dielectric absorption  
of various dielectrics on the web somewhere. I will try a  
search.

Back in the 70's when integrating analog to digital converters were new  
stuff the type of dielectric in the integrating capacitor was critical to  
reducing lesser significant digit errors. Intersil recommended polypropylene  
as the best with polystyrene the runner up. That was good because  
polystyrenes have to be hand installed, they can't withstand the heat of  
flow soldering. However I came to learn that not every capacitor

manufacturer could duplicate the error free performance of TRW (now ASC) polypropylene caps. The lesson is that the plastic film market has its problems with hyped products like any other market. Audiphools beware!

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

From gumbear at pacbell.net Sat Feb 2 16:41:17 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sat, 2 Feb 2013 13:41:17 -0800  
Subject: [BoatAnchors] Richmond VA hamfest photos  
References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.gmail.com>  
Message-ID: <002501ce018e\$0c5d7bc0\$4301a8c0@KB6NAX>

What's this fellow looking for, a donut?

[http://www.virhistory.com/ham/rich-13/IMG\\_2089.JPG](http://www.virhistory.com/ham/rich-13/IMG_2089.JPG)

For your entertainment.  
Photos at <http://www.virhistory.com/ham/rich-13.htm>

From w4rl at bellsouth.net Sat Feb 2 18:31:50 2013  
From: w4rl at bellsouth.net (Robert)  
Date: Sat, 02 Feb 2013 17:31:50 -0600  
Subject: [BoatAnchors] Richmond VA hamfest photos  
In-Reply-To: <002501ce018e\$0c5d7bc0\$4301a8c0@KB6NAX>  
References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.gmail.com>  
<002501ce018e\$0c5d7bc0\$4301a8c0@KB6NAX>  
Message-ID: <510DA1E6.7090901@bellsouth.net>

Thanks, Nick, for another nice pictorial posting for us all to enjoy.

QST fellow boatanchorites, slap on the flowers to Nick for doing this nice deep for us again.

73 de Robert W4RL Pensacola FL  
Trustee for W4GCM the Gulf Coast Mullet Society  
Net Thursdays @ 6 pm Central 3885 kcs the only naturally occurring 52 ohm spot on the 75 meterband. Celebrating our 10th year of operation.

On 2/2/2013 3:41 PM, Arden Allen wrote:  
> What's this fellow looking for, a donut?  
>  
> [http://www.virhistory.com/ham/rich-13/IMG\\_2089.JPG](http://www.virhistory.com/ham/rich-13/IMG_2089.JPG)  
>  
> For your entertainment.  
> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From johnmb at nc.rr.com Sat Feb 2 19:17:02 2013  
From: johnmb at nc.rr.com (john)  
Date: Sat, 02 Feb 2013 19:17:02 -0500  
Subject: [BoatAnchors] Richmond VA hamfest photos  
In-Reply-To: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.g  
mail.com>  
References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.gmail.com>  
Message-ID: <6.2.1.2.2.20130202191601.03e358a0@pop-server.nc.rr.com>

Hi Nick

Only Scrooge could dislike hamfest photos!

Looks like HF Amp heaven! Hope you found some good heavy Navy Metal.

John K5MO

At 04:32 PM 2/2/2013, Nick England wrote:  
>For your entertainment.  
>Photos at <http://www.virhistory.com/ham/rich-13.htm>  
>If you don't like to see photos of a hamfest you didn't attend, then  
>please hit delete.  
>cheers,  
>Nick K4NYW  
>-----  
>BoatAnchors mailing list  
>BoatAnchors at theporch.com  
><https://minime.theporch.com/mailman/listinfo/boatanchors>



From anchor at ec.rr.com Sat Feb 2 19:43:39 2013  
From: anchor at ec.rr.com (Al Parker)  
Date: Sat, 02 Feb 2013 19:43:39 -0500  
Subject: [BoatAnchors] Richmond VA hamfest photos  
In-Reply-To: <6.2.1.2.2.20130202191601.03e358a0@pop-server.nc.rr.com>  
References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B60qYMr-m7D5WMAA@mail.gmail.com>  
<6.2.1.2.2.20130202191601.03e358a0@pop-server.nc.rr.com>  
Message-ID: <510DB2BB.9060903@ec.rr.com>

I agree, thanks Nick. One of these yrs I'll get up there, too.  
CU all at Raleigh.  
73,

Al, W8UT  
www.boatanchors.org  
www.hammarlund.info

"There is nothing -- absolutely nothing -- half so much  
worth doing as simply messing about in boats"  
Ratty, to Mole

On 2/2/2013 7:17 PM, john wrote:

> Hi Nick  
>  
> Only Scrooge could dislike hamfest photos!  
>  
> Looks like HF Amp heaven! Hope you found some good heavy Navy Metal.  
>  
> John K5M0  
>  
>  
>  
> At 04:32 PM 2/2/2013, Nick England wrote:  
>> For your entertainment.  
>> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
>> If you don't like to see photos of a hamfest you didn't attend, then  
>> please hit delete.  
>> cheers,  
>> Nick K4NYW

From vilgotch at bigpond.net.au Sat Feb 2 19:26:29 2013  
From: vilgotch at bigpond.net.au (Morris Odell)  
Date: Sun, 3 Feb 2013 11:26:29 +1100  
Subject: [BoatAnchors] Richmond VA hamfest photos  
In-Reply-To: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B60qYMr-m7D5WMAA@mail.gmail.com>

References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA@mail.gmail.com>  
Message-ID: <000001ce01a5\$1c346330\$549d2990\$@bigpond.net.au>

They are lovely photos and those of us in other countries can only drool.  
You don't know how lucky you are!

73 de Morris VK3DOC

-----Original Message-----

From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of  
Nick England  
Sent: Sunday, 3 February 2013 8:32 AM  
To: Old Tube Radios (new)  
Subject: [BoatAnchors] Richmond VA hamfest photos

For your entertainment.

Photos at <http://www.virhistory.com/ham/rich-13.htm>

If you don't like to see photos of a hamfest you didn't attend, then please  
hit delete.

cheers,

Nick K4NYW

-----  
BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

-----

No virus found in this message.

Checked by AVG - [www.avg.com](http://www.avg.com)

Version: 2013.0.2897 / Virus Database: 2639/6072 - Release Date: 01/31/13

From arc5 at ix.netcom.com Sat Feb 2 22:18:57 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Sat, 2 Feb 2013 21:18:57 -0600  
Subject: [BoatAnchors] Need a Command Set Power Connector?  
Message-ID: <C131081550C34DA880BFCB777F3E9AF7@CompaqSR5710F>

If you need a Command Set power connector for  
either the receivers or the 274N or ATA transmitters,  
you need to jump on these: Ebay 221185136516  
Steve is an excellent source for many hard-to-find  
connectors.

From beckrep at citlink.net Sat Feb 2 23:38:02 2013  
From: beckrep at citlink.net (Paul Beckwith)  
Date: Sat, 02 Feb 2013 21:38:02 -0700  
Subject: [BoatAnchors] Richmond VA hamfest photos  
In-Reply-To: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B60qYMr-m7D5WMAA@mail.g  
mail.com>  
References: <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B60qYMr-m7D5WMAA@mail.gmail.com>  
Message-ID: <fb13bf\$a3ehpm@out02.dl1s.pa.frontiernet.net>

Thank you for sharing, Nick! I would have parted with some serious money.

73's de Paul K2LMQ Kingman, AZ

At 02:32 PM 2/2/2013, Nick England wrote:  
>For your entertainment.  
>Photos at <http://www.virhistory.com/ham/rich-13.htm>  
>If you don't like to see photos of a hamfest you didn't attend, then  
>please hit delete.  
>cheers,  
>Nick K4NYW

From k7sz at live.com Sun Feb 3 00:58:32 2013  
From: k7sz at live.com (Rich Arland)  
Date: Sun, 3 Feb 2013 00:58:32 -0500  
Subject: [BoatAnchors] BoatAnchors Digest, Vol 103, Issue 9  
In-Reply-To: <mailman.589.1359866865.253.boatanchors@theporch.com>  
References: <mailman.589.1359866865.253.boatanchors@theporch.com>  
Message-ID: <BLU172-W27166C3FECFF080B7A9F7FF6020@phx.gbl>

Nick:

Tnx for the pix. Nice SX-122 in that one shot. Been hungry for one of those for about 20 years! Never found one at a decent price. Performance wise they are not all that great...much like the SX-117 (of which I have restored a total of four). However, I'd still love to have a 122.

Noticed the Allied R-100A....another receiver I have lusted for since the 1960s. That DX-60/HR-10/HG-10 combo for \$200 also interested me...traded my entire station off to N2APB a few months ago and have been missing that set up ever since! Maybe I can get it back!!!

Again, tnx for the pix.

Rich Arland, K7SZ  
Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (4th ed)

BLOG: <http://commobunker.blogspot.com/>

> From: boatanchors-request at theporch.com  
> Subject: BoatAnchors Digest, Vol 103, Issue 9  
> To: boatanchors at theporch.com  
> Date: Sat, 2 Feb 2013 22:47:45 -0600  
>  
> Send BoatAnchors mailing list submissions to  
> boatanchors at theporch.com  
>  
> To subscribe or unsubscribe via the World Wide Web, visit  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
> or, via email, send a message with subject or body 'help' to  
> boatanchors-request at theporch.com  
>  
> You can reach the person managing the list at  
> boatanchors-owner at theporch.com  
>  
> When replying, please edit your Subject line so it is more specific  
> than "Re: Contents of BoatAnchors digest..."  
>  
>

> Today's Topics:

- >  
> 1. Richmond VA hamfest photos (Nick England)  
> 2. Re: paper caps failure (Arden Allen)  
> 3. Re: Richmond VA hamfest photos (Arden Allen)  
> 4. Re: Richmond VA hamfest photos (Robert)  
> 5. Re: Richmond VA hamfest photos (john)  
> 6. Re: Richmond VA hamfest photos (Al Parker)  
> 7. Re: Richmond VA hamfest photos (Morris Odell)  
> 8. Need a Command Set Power Connector? (David Stinson)  
> 9. Re: Richmond VA hamfest photos (Paul Beckwith)  
>  
>

> -----  
>

> Message: 1  
> Date: Sat, 2 Feb 2013 16:32:24 -0500  
> From: Nick England <navy.radio at gmail.com>  
> To: "Old Tube Radios (new)" <boatanchors at minime.theporch.com>  
> Subject: [BoatAnchors] Richmond VA hamfest photos

> Message-ID:  
> <CAB55hNc=eg8-P\_+BQyquh4fmsFWWHN2pK9B6OqYMr-m7D5WMAA at mail.gmail.com>  
> Content-Type: text/plain; charset=ISO-8859-1  
>  
> For your entertainment.  
> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> If you don't like to see photos of a hamfest you didn't attend, then  
> please hit delete.  
> cheers,  
> Nick K4NYW  
>  
>  
> -----  
>  
> Message: 2  
> Date: Sat, 2 Feb 2013 13:36:29 -0800  
> From: "Arden Allen" <gumbear at pacbell.net>  
> To: "Old Tube Radios \\\(new\\)" <boatanchors at minime.theporch.com>  
> Subject: Re: [BoatAnchors] paper caps failure  
> Message-ID: <001d01ce018d\$5ea12a40\$4301a8c0 at KB6NAX>  
> Content-Type: text/plain; charset="Windows-1252"  
>  
> > ....I don't remember the source at the moment but think it  
> may have been an old General Radio catalog that suggested  
> paper rather than mica for very low frequencies where  
> dielectric absorption is important.  
> Polystyrene is excellent for low dielectric absorption  
> and was used by GR for laboratory caps, Polypropylene is  
> likely another.  
> There is probably a chart giving dielectric absorption  
> of various dielectrics on the web somewhere. I will try a  
> search.  
>  
> Back in the 70's when integrating analog to digital converters were new  
> stuff the type of dielectric in the integrating capacitor was critical to  
> reducing lesser significant digit errors. Intersil recommended polypropylene  
> as the best with polystyrene the runner up. That was good because  
> polystyrenes have to be hand installed, they can't withstand the heat of  
> flow soldering. However I came to learn that not every capacitor  
> manufacturer could duplicate the error free performance of TRW (now ASC)  
> polypropylene caps. The lesson is that the plastic film market has its  
> problems with hyped products like any other market. Audiophools beware!  
>  
> Arden Allen  
> KB6NAX  
>  
> Adopt a shelter dog,  
> save an innocent life,

> and make a friend forever =:-)  
>  
>  
>  
> -----  
>  
> Message: 3  
> Date: Sat, 2 Feb 2013 13:41:17 -0800  
> From: "Arden Allen" <gumbear at pacbell.net>  
> To: "Nick England" <navy.radio at gmail.com>, "Old Tube Radios \ (new\)"  
> <boatanchors at minime.theporch.com>  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <002501ce018e\$0c5d7bc0\$4301a8c0 at KB6NAX>  
> Content-Type: text/plain; charset="iso-8859-1"  
>  
> What's this fellow looking for, a donut?  
>  
> [http://www.virhistory.com/ham/rich-13/IMG\\_2089.JPG](http://www.virhistory.com/ham/rich-13/IMG_2089.JPG)  
>  
> For your entertainment.  
> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
>  
>  
>  
> -----  
>  
> Message: 4  
> Date: Sat, 02 Feb 2013 17:31:50 -0600  
> From: Robert <w4rl at bellsouth.net>  
> To: boatanchors at minime.theporch.com  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <510DA1E6.7090901 at bellsouth.net>  
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed  
>  
> Thanks, Nick, for another nice pictorial posting for us all to enjoy.  
>  
> QST fellow boatanchorites, slap on the flowers to Nick for doing this  
> nice deep for us again.  
>  
> 73 de Robert W4RL Pensacola FL  
> Trustee for W4GCM the Gulf Coast Mullet Society  
> Net Thursdays @ 6 pm Central 3885 kcs the only naturally occurring 52  
> ohm spot on the 75 meterband. Celebrating our 10th year of operation.  
>  
>  
> On 2/2/2013 3:41 PM, Arden Allen wrote:  
> > What's this fellow looking for, a donut?  
> >

> > [http://www.virhistory.com/ham/rich-13/IMG\\_2089.JPG](http://www.virhistory.com/ham/rich-13/IMG_2089.JPG)  
> >  
> > For your entertainment.  
> > Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> >  
> > -----  
> > BoatAnchors mailing list  
> > BoatAnchors at theporch.com  
> > <https://minime.theporch.com/mailman/listinfo/boatanchors>  
> >  
>  
>  
>  
> -----  
>  
> Message: 5  
> Date: Sat, 02 Feb 2013 19:17:02 -0500  
> From: john <johnmb at nc.rr.com>  
> To: Nick England <navy.radio at gmail.com>, "Old Tube Radios (new)"  
> <boatanchors at minime.theporch.com>  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <6.2.1.2.2.20130202191601.03e358a0 at pop-server.nc.rr.com>  
> Content-Type: text/plain; charset="us-ascii"; format=flowed  
>  
> Hi Nick  
>  
> Only Scrooge could dislike hamfest photos!  
>  
> Looks like HF Amp heaven! Hope you found some good heavy Navy Metal.  
>  
> John K5M0  
>  
>  
>  
> At 04:32 PM 2/2/2013, Nick England wrote:  
> >For your entertainment.  
> >Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> >If you don't like to see photos of a hamfest you didn't attend, then  
> >please hit delete.  
> >cheers,  
> >Nick K4NYW  
> >-----  
> >BoatAnchors mailing list  
> >BoatAnchors at theporch.com  
> ><https://minime.theporch.com/mailman/listinfo/boatanchors>  
>  
>  
>

> -----  
>  
> Message: 6  
> Date: Sat, 02 Feb 2013 19:43:39 -0500  
> From: Al Parker <anchor at ec.rr.com>  
> To: john <johnmb at nc.rr.com>  
> Cc: "Old Tube Radios \ (new\)" <boatanchors at minime.theporch.com>  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <510DB2BB.9060903 at ec.rr.com>  
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed  
>  
> I agree, thanks Nick. One of these yrs I'll get up there, too.  
> CU all at Raleigh.  
> 73,  
>  
> Al, W8UT  
> www.boatanchors.org  
> www.hammarlund.info  
>  
> "There is nothing -- absolutely nothing -- half so much  
> worth doing as simply messing about in boats"  
> Ratty, to Mole  
>  
> On 2/2/2013 7:17 PM, john wrote:  
> > Hi Nick  
> >  
> > Only Scrooge could dislike hamfest photos!  
> >  
> > Looks like HF Amp heaven! Hope you found some good heavy Navy Metal.  
> >  
> > John K5M0  
> >  
> >  
> >  
> > At 04:32 PM 2/2/2013, Nick England wrote:  
> >> For your entertainment.  
> >> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> >> If you don't like to see photos of a hamfest you didn't attend, then  
> >> please hit delete.  
> >> cheers,  
> >> Nick K4NYW  
>  
>  
> -----  
>  
> Message: 7  
> Date: Sun, 3 Feb 2013 11:26:29 +1100  
> From: "Morris Odell" <vilgotch at bigpond.net.au>



> To: <boatanchors at theporch.com>  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <000001ce01a5\$1c346330\$549d2990\$@bigpond.net.au>  
> Content-Type: text/plain; charset="us-ascii"  
>  
> They are lovely photos and those of us in other countries can only drool.  
> You don't know how lucky you are!  
>  
> 73 de Morris VK3DOC  
>  
>  
>  
> -----Original Message-----  
> From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of  
> Nick England  
> Sent: Sunday, 3 February 2013 8:32 AM  
> To: Old Tube Radios (new)  
> Subject: [BoatAnchors] Richmond VA hamfest photos  
>  
> For your entertainment.  
> Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> If you don't like to see photos of a hamfest you didn't attend, then please  
> hit delete.  
> cheers,  
> Nick K4NYW  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>  
>  
> -----  
> No virus found in this message.  
> Checked by AVG - [www.avg.com](http://www.avg.com)  
> Version: 2013.0.2897 / Virus Database: 2639/6072 - Release Date: 01/31/13  
>  
>  
>  
> -----  
>  
> Message: 8  
> Date: Sat, 2 Feb 2013 21:18:57 -0600  
> From: "David Stinson" <arc5 at ix.netcom.com>  
> To: <milsurplus at mailman.qth.net>, <boatanchors at theporch.com>,  
> <boatanchors at mailman.qth.net>, "ARC-5 List" <arc5 at mailman.qth.net>  
> Subject: [BoatAnchors] Need a Command Set Power Connector?  
> Message-ID: <C131081550C34DA880BFCB777F3E9AF7 at CompaqSR5710F>  
> Content-Type: text/plain; format=flowed; charset="iso-8859-1";

> reply-type=original  
>  
> If you need a Command Set power connector for  
> either the receivers or the 274N or ATA transmitters,  
> you need to jump on these: Ebay 221185136516  
> Steve is an excellent source for many hard-to-find  
> connectors.  
>  
>  
> -----  
>  
> Message: 9  
> Date: Sat, 02 Feb 2013 21:38:02 -0700  
> From: Paul Beckwith <beckrep at citlink.net>  
> To: Nick England <navy.radio at gmail.com>, "Old Tube Radios (new)"  
> <boatanchors at minime.theporch.com>  
> Subject: Re: [BoatAnchors] Richmond VA hamfest photos  
> Message-ID: <fb13bf\$a3ehpm at out02.dlts.pa.frontiernet.net>  
> Content-Type: text/plain; charset="us-ascii"; format=flowed  
>  
> Thank you for sharing, Nick! I would have parted with some serious money.  
>  
> 73's de Paul K2LMQ Kingman, AZ  
>  
>  
> At 02:32 PM 2/2/2013, Nick England wrote:  
> >For your entertainment.  
> >Photos at <http://www.virhistory.com/ham/rich-13.htm>  
> >If you don't like to see photos of a hamfest you didn't attend, then  
> >please hit delete.  
> >cheers,  
> >Nick K4NYW  
>  
>  
>  
> -----  
>  
> Subject: Digest Footer  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>  
>  
> -----  
>  
> End of BoatAnchors Digest, Vol 103, Issue 9

> \*\*\*\*\*

From landn2 at frontier.com Sun Feb 3 03:29:56 2013  
From: landn2 at frontier.com (Liles and Naomi Garcia)  
Date: Sun, 3 Feb 2013 00:29:56 -0800  
Subject: [BoatAnchors] Many Thanks For Hamfest Pictures!!  
Message-ID: <OBEDKFDGHEPDGADPPEHFAEBHEBAA.landn2@frontier.com>

Good evening Everybody,

Nick, many thanks for the Richmond Hamfest pictures!!

Everybody have a great weekend!!

Best regards from Aloha, Oregon,  
Liles Garcia  
landn2 at frontier.com

From scb at hiwaay.net Sun Feb 3 09:41:15 2013  
From: scb at hiwaay.net (scb at hiwaay.net)  
Date: Sun, 03 Feb 2013 08:41:15 -0600  
Subject: [BoatAnchors] Plastic film cap failure mode  
Message-ID: <20130203084115.684814g6iwnic5xn@webmail.hiwaay.net>

Greetings Group;

A retired radar tech informed me of a failure mode common to some plastic film caps, particularly German ERO branded, that fail due to interface resistance between lead and foil. Apparently they didn't spot-weld them during mfging to assure life-long conductive integrity. I expect there were others, who'd-a thunk that increased ESR would become a problem with these assumedly high-reliability sub-components, something else to watch out for.  
Steve Bringhurst

From wb3fau55 at neo.rr.com Sun Feb 3 10:15:04 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Sun, 3 Feb 2013 10:15:04 -0500  
Subject: [BoatAnchors] Richmond Hamfest  
Message-ID: <20130203151505.4UNGF.89912.root@cdptpa-web02-z02>

nice pictures Nick! thank you. glad i did not go, i would have come home with a lot of goodies!

From bkemp at bobbkemp.com Sun Feb 3 22:44:15 2013  
From: bkemp at bobbkemp.com (bkemp at bobbkemp.com)  
Date: Sun, 3 Feb 2013 21:44:15 -0600  
Subject: [BoatAnchors] caps  
Message-ID: <0AA2E98CF0F54928A9DB84A4DD9AC78F@Bob>

Is there a source other than mouser for 100uf 450 or 500v screw terminal electrolytics. I had souce but lost my bookmarks in a past hard drive crash? Got a AC-400 coming and want to mount some computer style vertically mounted electrolytics on the unit to make it look good. Mouser has some for \$30 but I don't believe they are that high. the 1.375 mounting bracket works super as the hold down for these caps...just need the caps is all?  
wa0vrc  
Bob

From tarheel6 at msn.com Sun Feb 3 22:56:44 2013  
From: tarheel6 at msn.com (Tom Bridgers)  
Date: Sun, 3 Feb 2013 22:56:44 -0500  
Subject: [BoatAnchors] Richmond HF  
In-Reply-To: <mailman.588.1359866865.253.boatanchors@theporch.com>  
References: <mailman.588.1359866865.253.boatanchors@theporch.com>  
Message-ID: <BAY155-W927CBB6083B6BA80B42F290010@phx.gbl>

Great pix, Nick! Mebbe I missed one, but I don't believe I saw a single photo of an ARC-5 type TX or RX... However your pix show lotsa nice gear in attendance, and I wish I could have been there, too, to drool over them with you all! For example, I noticed a couple of R-390A's, and one parts unit. How's the reassembly to the big dinosaur TX coming along? Best, -Tom For your entertainment.  
Photos at <http://www.virhistory.com/ham/rich-13.htm>  
If you don't like to see photos of a hamfest you didn't attend, then please hit delete.  
cheers,  
Nick K4NYW

From spr at earthlink.net Sun Feb 3 23:32:20 2013  
From: spr at earthlink.net (Scott Robinson)  
Date: Sun, 03 Feb 2013 20:32:20 -0800  
Subject: [BoatAnchors] caps  
In-Reply-To: <0AA2E98CF0F54928A9DB84A4DD9AC78F@Bob>  
References: <0AA2E98CF0F54928A9DB84A4DD9AC78F@Bob>

Message-ID: <510F39D4.4040506@earthlink.net>

Hi Bob,

Price doesn't surprise me. Those are premium caps with high ripple current ratings, and are not sold in large quantities.

Snap in parts will do nicely, if the ripple current ratings are adequate, and are much cheaper.

Regards,

Scott

On 2/3/13 7:44 PM, bkemp at bobbkemp.com wrote:

> Is there a source other than mouser for 100uf 450 or 500v screw terminal electrolytics. I had souce but lost my bookmarks in a past  
> hard drive crash? Got a AC-400 coming and want to mount some computer style vertically mounted electrolytics on the unit to make it look good. Mouser has some for \$30 but I don't believe they are that high. the 1.375 mounting bracket works super as the hold down for these caps...just need the caps is all?

> wa0vrc

> Bob

>

>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

From arc5 at ix.netcom.com Tue Feb 5 08:41:45 2013

From: arc5 at ix.netcom.com (David Stinson)

Date: Tue, 5 Feb 2013 07:41:45 -0600

Subject: [BoatAnchors] Electronic Specialty "RANGER" Light Air Set

Message-ID: <8621C3C545BA4EE7A8D2D46B5B9FC1D5@CompaqSR5710F>

Been beating life back into late-1945 light aircraft sets produced by the "Ranger Aircraft Radio Division" of Electronic Specialty Company.

The transmitter is a model 209 and

the receiver is a model 120.

The transmitter will also match-up with the E.S. Ranger model 116 receiver.

I've got them on-the-air and worked Texas, Miss. and Alabama this morning with good reports for

10 watts out. Here is a crummy photo of the set in a temporary lash-up:

<http://home.netcom.com/~arc5/rangerset.jpg>

I temporarily replaced the transmitter antenna connector until I can get the correct one.

The 209 transmitter has an internal vibrator supply with a pair of 6X5 rectifiers which powers the entire set. Antenna and power switching is in the transmitter and connected to the receiver via the Jones plugs on the front of the transmitter and rear of the receiver.

Transmitter is a 12A6 crystal oscillator driving an 807 PA running 400 VDC with a parr. tuned tank and coil tap to match the antenna.

Haven't tried to tweek the output for exactly 50 ohms. A 12SL7 mic amplifier drives P-P 6V6 plate modulators. There is also a 12J5 screen clamp tube to protect the 807 from loss of drive.

I had two of the Ranger 120 recievers, one with and one without a phone jack on the front panel. I kept the one with the jack. The 120 is an LF "Range" receiver with one of my converters installed:

<http://home.netcom.com/~arc5/Imprvconverter.jpg>

<http://home.netcom.com/~arc5/CNVTRINSTL.JPG>

Note the increase in the supply voltage dropping resistor in the converter. The original was "too hot" for this set and dropping the supply voltage fixed it. Might be a good place for an RF Gain control.

The rear of the reciever has an 8-pin female Jones plug which matches that on the transmitter. There is also a four-pin male Jones which is intended to connect a mic/phones headset. Here are the connections:

Transmitter

- 1- Ground
- 2- A+ out to rcvr
- 3- B+ out to rcvr (dropping resistor supplies 200 V)
- 4- Switched to ground to turn set "On."
- 5- Mic Audio
- 6- PTT to Grnd
- 7- Ant. out to rcvr

8- (Sidetone? Not used here)

Receiver (8-pin)

- 1- Ground
- 2- A+ in
- 3- B+ in
- 4- Switches to ground from Off/On Vol.
- 5- to 4-pin connector (mic audio)
- 6- to 4-pin connector (ptt)
- 7- Ant. in
- 8- (not used here)

Receiver 4-pin

- 1- Ground
- 2- Audio out
- 3- Mic audio
- 4- PTT

From bob at nofrowns.net Tue Feb 5 10:43:20 2013  
From: bob at nofrowns.net (Bob Jackson)  
Date: Tue, 5 Feb 2013 09:43:20 -0600  
Subject: [BoatAnchors] Knobs Needed  
Message-ID: <58C7D60592354F5483BC4AE9DB37AE22@c1408123a>

I need one each of the following knobs:

Hallicrafters S-38 large tuning knob with/without metal ring insert

Military style black knob, i.e. has scalloped outer edge, approx. 1-1/2" diameter

Both are 1/4" shaft - round hole (i.e. not keyed)

Any help appreciated.

Tnx & 73 to all,

Bob/AG5X

From arc5 at ix.netcom.com Tue Feb 5 18:34:32 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Tue, 5 Feb 2013 17:34:32 -0600  
Subject: [BoatAnchors] CORRECTION: Electronic Specialty "RANGER" Light Air Set  
In-Reply-To: <8621C3C545BA4EE7A8D2D46B5B9FC1D5@CompaqSR5710F>  
References: <8621C3C545BA4EE7A8D2D46B5B9FC1D5@CompaqSR5710F>  
Message-ID: <A6EB021C510C4BD4BC18E997143F6732@CompaqSR5710F>

Please correct:

- > Receiver 4-pin
- > 1- Ground
- > 2- Audio out
- > 3- Mic audio
- > 4- PTT

to read:

- Receiver 4-pin
- 1- Ground
- 2- Audio out
- 3- PTT
- 4- Mic audio

From bkemp at bobbkemp.com Wed Feb 6 14:00:32 2013  
From: bkemp at bobbkemp.com (Bob Kemp)  
Date: Wed, 6 Feb 2013 13:00:32 -0600  
Subject: [BoatAnchors] National  
Message-ID: <01aa01ce049c\$3d6d8500\$b8488f00\$@com>

Is there a yahoo group for National Radios.

Need some basic info on NCX500's and wondering if there is such a group.  
Bob

Wa0vrc

From w3nu at roadrunner.com Wed Feb 6 14:20:11 2013  
From: w3nu at roadrunner.com (Charles Ring)  
Date: Wed, 06 Feb 2013 14:20:11 -0500  
Subject: [BoatAnchors] National  
In-Reply-To: <01aa01ce049c\$3d6d8500\$b8488f00\$@com>  
References: <01aa01ce049c\$3d6d8500\$b8488f00\$@com>  
Message-ID: <5112ACEB.3060507@roadrunner.com>

On 2/6/2013 1400, Bob Kemp wrote:



> Is there a yahoo group for National Radios.  
>  
> Need some basic info on NCX500's and wondering if there is such a group.  
> Bob  
>  
> Wa0vrc  
>  
>  
>

i am on two active ones:

national at mailman.qth.net  
nationalradio at yahoogroups.com

--

\*Charles Ring W3NU\*

From dmetz at ntelos.net Wed Feb 6 17:22:29 2013  
From: dmetz at ntelos.net (Dave or Debbie Metz)  
Date: Wed, 06 Feb 2013 17:22:29 -0500  
Subject: [BoatAnchors] Smoke smell removal procedure  
Message-ID: <5112D7A5.6040302@ntelos.net>

I recently came into possession of a Kenwood Hybrid, the TS-530S (6146 finals and a driver tube). Anyway, it is the stinkiest radio I have been around in a long while from cigarette smoke. My thought was to remove the power transformer, the digital display assembly, (Obviously, remove the front panel and knobs and do that by hand) and head to a steam cleaner used in a shop. First, spray it with say Krud Kutter, let it soak a couple of minutes, hit it with the steam, then douse it with distilled water, air blow it off, and finally put it in a hot attic for month or so. A fully tube radio, I would not have hesitation to this procedure as I have done it before to several real boatanchors and an R390 and the results were great. Just a bit gun shy of this radio and its circuit boards. What's the consensus of this esteemed group?

Thanks,  
Dave

From spr at earthlink.net Wed Feb 6 17:38:23 2013  
From: spr at earthlink.net (spr at earthlink.net)  
Date: Wed, 6 Feb 2013 14:38:23 -0800 (GMT-08:00)  
Subject: [BoatAnchors] Smoke smell removal procedure

Message-ID: <22537237.1360190304366.JavaMail.root@elwamui-darkeyed.atl.sa.earthlink.net>

Hi Dave,

I have used plain Windex for removing tobacco residue with good success. It's a very low residue cleaner, since any residue leaves the glass looking murky. I've never had it hurt anything, either.

/scott

-----Original Message-----

>From: Dave or Debbie Metz <dmetz at ntelos.net>

>Sent: Feb 6, 2013 2:22 PM

>To: Boatanchors <boatanchors at theporch.com>

>Subject: [BoatAnchors] Smoke smell removal procedure

>

>I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
>finals and a driver tube). Anyway, it is the stinkiest radio I have been  
>around in a long while from cigarette smoke. My thought was to remove  
>the power transformer, the digital display assembly, (Obviously, remove  
>the front panel and knobs and do that by hand) and head to a steam  
>cleaner used in a shop. First, spray it with say Krud Kutter, let it  
>soak a couple of minutes, hit it with the steam, then douse it with  
>distilled water, air blow it off, and finally put it in a hot attic for  
>month or so. A fully tube radio, I would not have hesitation to this  
>procedure as I have done it before to several real boatanchors and an  
>R390 and the results were great. Just a bit gun shy of this radio and  
>its circuit boards. What's the consensus of this esteemed group?

>

>Thanks,

>Dave

>

>

>-----  
>BoatAnchors mailing list

>BoatAnchors at theporch.com

><https://minime.theporch.com/mailman/listinfo/boatanchors>

From oldradio at comcast.net Wed Feb 6 17:45:34 2013

From: oldradio at comcast.net (oldradio at comcast.net)

Date: Wed, 6 Feb 2013 22:45:34 +0000 (UTC)

Subject: [BoatAnchors] Smoke smell removal procedure

In-Reply-To: <22537237.1360190304366.JavaMail.root@elwamui-darkeyed.atl.sa.earthlink.net>

Message-ID:

<955269919.326546.1360190734699.JavaMail.root@sz0213a.westchester.pa.mail.comcast.net>

Take some Kitty litter in a large trash bag, and gently place the radio in there, then seal the bag for a few days. This should lessen the odor. I use this method with my old papers and books that need it. Never tried it with a radio though.

Caution with Windex and old dials, sometimes it removes the print on the dials.

73, John Dilks, K2TQN

-.-

----- Original Message -----

From: spr at earthlink.net

To: "Dave or Debbie Metz" <dmetz at ntelos.net>, "Boatanchors" <boatanchors at theporch.com>

Sent: Wednesday, February 6, 2013 5:38:23 PM

Subject: Re: [BoatAnchors] Smoke smell removal procedure

Hi Dave,

I have used plain Windex for removing tobacco residue with good success. It's a very low residue cleaner, since any residue leaves the glass looking murky. I've never had it hurt anything, either.

/scott

-----Original Message-----

>From: Dave or Debbie Metz <dmetz at ntelos.net>

>Sent: Feb 6, 2013 2:22 PM

>To: Boatanchors <boatanchors at theporch.com>

>Subject: [BoatAnchors] Smoke smell removal procedure

>

>I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
>finals and a driver tube). Anyway, it is the stinkiest radio I have been  
>around in a long while from cigarette smoke. My thought was to remove  
>the power transformer, the digital display assembly, (Obviously, remove  
>the front panel and knobs and do that by hand) and head to a steam  
>cleaner used in a shop. First, spray it with say Krud Kutter, let it  
>soak a couple of minutes, hit it with the steam, then douse it with  
>distilled water, air blow it off, and finally put it in a hot attic for  
>month or so. A fully tube radio, I would not have hesitation to this  
>procedure as I have done it before to several real boatanchors and an

>R390 and the results were great. Just a bit gun shy of this radio and  
>its circuit boards. What's the consensus of this esteemed group?

>

>Thanks,

>Dave

>

>

>-----  
>BoatAnchors mailing list

>BoatAnchors at theporch.com

><https://minime.theporch.com/mailman/listinfo/boatanchors>

-----  
BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From w7fe at cox.net Wed Feb 6 17:53:37 2013

From: w7fe at cox.net (w7fe)

Date: Wed, 6 Feb 2013 14:53:37 -0800

Subject: [BoatAnchors] Smoke smell removal procedure

References: <5112D7A5.6040302@ntelos.net>

Message-ID: <3CFDF3FA3D1C4A0D8E3776A15BD6EE7A@DESKTOP>

You might try this Yahoo group a try as well to pose your question to even  
more folks with direct experience in cleaning up the TS-530.

TS-520\_820\_530\_830

73 de W7FE

----- Original Message -----

From: "Dave or Debbie Metz" <dmetz at ntelos.net>

To: "Boatanchors" <boatanchors at theporch.com>

Sent: Wednesday, February 06, 2013 2:22 PM

Subject: [BoatAnchors] Smoke smell removal procedure

>I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
>finals and a driver tube). Anyway, it is the stinkiest radio I have been  
>around in a long while from cigarette smoke. My thought was to remove the  
>power transformer, the digital display assembly, (Obviously, remove the  
>front panel and knobs and do that by hand) and head to a steam cleaner used  
>in a shop. First, spray it with say Krud Kutter, let it soak a couple of  
>minutes, hit it with the steam, then douse it with distilled water, air  
>blow it off, and finally put it in a hot attic for month or so. A fully  
>tube radio, I would not have hesitation to this procedure as I have done it

>before to several real boatanchors and an R390 and the results were great.  
>Just a bit gun shy of this radio and its circuit boards. What's the  
>consensus of this esteemed group?

>

> Thanks,

> Dave

>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From: spr at earthlink.net Wed Feb 6 18:05:46 2013  
From: spr at earthlink.net (spr at earthlink.net)  
Date: Wed, 6 Feb 2013 15:05:46 -0800 (GMT-08:00)  
Subject: [BoatAnchors] Smoke smell removal procedure  
Message-ID: <10851278.1360191946669.JavaMail.root@elwamui-darkeyed.atl.sa.earthlink.net>

Hi Jack,

All the Windex residue is volatile and won't stay behind. It will make some kind of crud with the tobacco tars, but that should not be volatile and should get wiped away mechanically during the cleaning process.

YMMV!

/scott

-----Original Message-----

>From: Jack Harper <jharper at secureoutcomes.net>

>Sent: Feb 6, 2013 2:46 PM

>To: "spr at earthlink.net" <spr at earthlink.net>

>Cc: Dave or Debbie Metz <dmetz at ntelos.net>, Boatanchors <boatanchors at theporch.com>

>Subject: Re: [BoatAnchors] Smoke smell removal procedure

>

>Question for the List -

>

>Is there any risk from the Windex ammonia etc leaving behind any sort of ionized RF leaky residue that might create headaches - coil forms, on capacitors and the like?

>

>I have wondered about that.  
>  
>Regards to the List -  
>  
>Jack, W0JY (Friend to all things Hammarlund)  
>  
>  
>  
>Sent from my iPhone  
>  
>On Feb 6, 2013, at 17:38, spr at earthlink.net wrote:  
>  
>> Hi Dave,  
>>  
>> I have used plain Windex for removing tobacco residue with good success. It's a  
very low  
>> residue cleaner, since any residue leaves the glass looking murky. I've never  
had it hurt anything, either.  
>>  
>> /scott  
>>  
>>  
>> -----Original Message-----  
>>> From: Dave or Debbie Metz <dmetz at ntelos.net>  
>>> Sent: Feb 6, 2013 2:22 PM  
>>> To: Boatanchors <boatanchors at theporch.com>  
>>> Subject: [BoatAnchors] Smoke smell removal procedure  
>>>  
>>> I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
>>> finals and a driver tube). Anyway, it is the stinkiest radio I have been  
>>> around in a long while from cigarette smoke. My thought was to remove  
>>> the power transformer, the digital display assembly, (Obviously, remove  
>>> the front panel and knobs and do that by hand) and head to a steam  
>>> cleaner used in a shop. First, spray it with say Krud Kutter, let it  
>>> soak a couple of minutes, hit it with the steam, then douse it with  
>>> distilled water, air blow it off, and finally put it in a hot attic for  
>>> month or so. A fully tube radio, I would not have hesitation to this  
>>> procedure as I have done it before to several real boatanchors and an  
>>> R390 and the results were great. Just a bit gun shy of this radio and  
>>> its circuit boards. What's the consensus of this esteemed group?  
>>>  
>>> Thanks,  
>>> Dave

From gumbear at pacbell.net Wed Feb 6 18:57:34 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Wed, 6 Feb 2013 15:57:34 -0800

Subject: [BoatAnchors] Smoke smell removal procedure  
References: <5112D7A5.6040302@ntelos.net>  
Message-ID: <002a01ce04c5\$bf70c430\$4301a8c0@KB6NAX>

> I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
finals and a driver tube). Anyway, it is the stinkiest radio I have been  
around in a long while from cigarette smoke. ....

The radio has been coated with the unburned resins in the tobacco smoke, the  
same junk that coats the inside of the lungs of the smoker. Perhaps the  
smoker could extend his life expectancy by drowning himself in Windex.... I  
digress. I like your process, Dave, to thoroughly clean the radio inside  
and out. But there is even less to worry about with solid state stuff, just  
make sure you do a good flushing job of all the crooks and crannies about  
the smaller components on the circuit boards. And of course, applying  
contact cleaner/lubricant/protectant to and remating connectors is well  
advised, not to mention the switches.

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

From ranickel at comcast.net Wed Feb 6 18:53:04 2013  
From: ranickel at comcast.net (Robert Nickels)  
Date: Wed, 06 Feb 2013 17:53:04 -0600  
Subject: [BoatAnchors] Smoke smell removal procedure  
In-Reply-To:  
<955269919.326546.1360190734699.JavaMail.root@sz0213a.westchester.pa.mail.comcast.  
net>  
References:  
<955269919.326546.1360190734699.JavaMail.root@sz0213a.westchester.pa.mail.comcast.  
net>  
Message-ID: <5112ECE0.1040001@comcast.net>

On 2/6/2013 4:45 PM, oldradio at comcast.net wrote:

> Take some Kitty litter in a large trash bag, and gently place the radio in  
there, then seal the bag for a few days.  
Another material that is often touted for de-stinking is dryer  
sheets. I've used them before but just thought the radio came out  
smelling like laundry. Which makes sense because the typical dryer  
sheet is meant to eliminate static, and adds a little perfume at the  
same time.

I haven't tried it, but what should work better is Febreze, which has a fancy chemical in it that can actually eliminate bad odors, not just cover them up with good ones. You can read about it here:  
<http://en.wikipedia.org/wiki/Febreze> I'll bet a lot of us would like to know how well it works, as we've all come across stinky radios on occasion.

73, Bob W9RAN

From wb3fau55 at neo.rr.com Wed Feb 6 19:44:23 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Wed, 6 Feb 2013 19:44:23 -0500  
Subject: [BoatAnchors] Smoke smell removal procedure  
In-Reply-To: <5112ECE0.1040001@comcast.net>  
Message-ID: <20130207004423.73BFJ.109240.root@cdptpa-web07-z01>

run it thru the dishwasher, also charcoal will eat up the odor...  
---- Robert Nickels <ranickel at comcast.net> wrote:  
> On 2/6/2013 4:45 PM, oldradio at comcast.net wrote:  
> > Take some Kitty litter in a large trash bag, and gently place the radio in there, then seal the bag for a few days.  
> Another material that is often touted for de-stinking is dryer sheets. I've used them before but just thought the radio came out smelling like laundry. Which makes sense because the typical dryer sheet is meant to eliminate static, and adds a little perfume at the same time.  
>  
> I haven't tried it, but what should work better is Febreze, which has a fancy chemical in it that can actually eliminate bad odors, not just cover them up with good ones. You can read about it here:  
> <http://en.wikipedia.org/wiki/Febreze> I'll bet a lot of us would like to know how well it works, as we've all come across stinky radios on occasion.  
>  
> 73, Bob W9RAN  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From kd5byb at kd5byb.net Wed Feb 6 20:03:13 2013  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Wed, 06 Feb 2013 19:03:13 -0600  
Subject: [BoatAnchors] Smoke smell removal procedure  
In-Reply-To: <5112D7A5.6040302@ntelos.net>



References: <5112D7A5.6040302@ntelos.net>

Message-ID: <5112FD51.2000307@kd5byb.net>

Hi Dave,

At one point in time I obtained an SP-600 that had been exposed to cat urine. That caused quite the stir, and for a while, I was quite infamous around here. ;) Just to complete the walk down memory lane, the cat pee SP-600 was taken to the local quarter-operated car wash and had the power hose taken to it. It then dried in the Texas sun and worked great.

But, the TS-530S is neither fully tube, nor built to the same standard as the SP-600. The 600 had sealed transformers, had been MFP'ed if I remember right, and no circuit boards.

One trick I've used on leather articles that stink is to put them into a plastic bag with a fabric softener dryer sheet. The stink was gone, but now smelled like a dryer sheet.

As to liquid cleaners, I like Windex too. Effective and the only its ever hurt for me is a dial scale on a nasty, parts-only Halli SX-24. It too was from a smoking environment...

Anyways, let us know what you end up doing and how well it works.

thanks and 73,  
ben, kd5byb.

On 2/6/2013 4:22 PM, Dave or Debbie Metz wrote:

> I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
> finals and a driver tube). Anyway, it is the stinkiest radio I have been  
> around in a long while from cigarette smoke. My thought was to remove

From arc5 at ix.netcom.com Wed Feb 6 21:02:18 2013

From: arc5 at ix.netcom.com (David Stinson)

Date: Wed, 6 Feb 2013 20:02:18 -0600

Subject: [BoatAnchors] Smoke smell removal procedure

In-Reply-To: <5112D7A5.6040302@ntelos.net>

References: <5112D7A5.6040302@ntelos.net>

Message-ID: <6A0AEE426BFA4922AB37A9381691BB35@CompaqSR5710F>

I've also "baptised" boatanchor radios to good effect, but I would not recommend doing that with any "plastic" radio. They are too fragile and water can get in and under some

tight places on a sand-state board.

No offense, but I've tangled with a couple of the old Kenwoodie "TS-xxx" radios. The boards are quite fragile and so are the little sandy doo-hickys I don't want another one to work on even if it was free. I have only so many hours of fun radio tinkering left to me in this life and I don't want to waste a single one on a frustrating plastic radio I don't care about.

Just one old f\*rt's opinion.

73 DE Dave AB5S

From hankvc at lostwells.net Thu Feb 7 12:11:49 2013  
From: hankvc at lostwells.net (HankVC)  
Date: Thu, 7 Feb 2013 10:11:49 -0700 (MST)  
Subject: [BoatAnchors] Smoke smell removal procedure  
In-Reply-To: <5112D7A5.6040302@ntelos.net>  
Message-ID: <201302071711.r17HBnu5013131@joanne.lostwells.net>

The esteemed Dave or Debbie Metz has said:

>

> I recently came into possession of a Kenwood Hybrid, the TS-530S (6146  
> finals and a driver tube). Anyway, it is the stinkiest radio I have been  
> around in a long while from cigarette smoke. My thought was to remove  
> the power transformer, the digital display assembly, (Obviously, remove  
> the front panel and knobs and do that by hand) and head to a steam  
> cleaner used in a shop. First, spray it with say Krud Kutter, let it  
> soak a couple of minutes, hit it with the steam, then douse it with  
> distilled water, air blow it off, and finally put it in a hot attic for  
> month or so.

>

That sounds pretty rugged to me. I use straight household ammonia for internal cleanup. You want clear ammonia, not the sudsy stuff. Apply to paper towel or facial tissues and wipe things down. Don't use it on things like dials. I prefer this to things like Windex as clear ammonia evaporates completely leaving no residue, and wiping things rather than soaking them means no damage from penetration. Use Q-tips to get into nooks and crannies. 3M adhesive remover will remove most sticky stuff---chewing gum, old labels and residue from them, etc. Once again, use wipes, don't flood anything with a solvent.

This is akin to what art restorers do in cleaning old paintings. Watch the color that the wipes are picking up.

Hank

From mike at oldaudio.net Thu Feb 7 14:59:46 2013  
From: mike at oldaudio.net (Mike Durff)  
Date: Thu, 7 Feb 2013 11:59:46 -0800 (PST)  
Subject: [BoatAnchors] Smoke smell removal procedure  
Message-ID: <1360267186.22311.YahooMailClassic@web5719.biz.mail.ne1.yahoo.com>

Robert said:

"...Another material that is often touted for de-stinking is? dryer sheets.???I've used them before but just thought the radio came out smelling like laundry..."

I tried this, but the wife complained about the noise, and the corners of the chassis came out bent, never mind the scratches inside the dryer.  
TNX, MD

From mike at oldaudio.net Thu Feb 7 15:00:37 2013  
From: mike at oldaudio.net (Mike Durff)  
Date: Thu, 7 Feb 2013 12:00:37 -0800 (PST)  
Subject: [BoatAnchors] Smoke smell removal procedure  
Message-ID: <1360267237.83689.YahooMailClassic@web5714.biz.mail.ne1.yahoo.com>

Robert said:

"...Another material that is often touted for de-stinking is? dryer sheets.???I've used them before but just thought the radio came out smelling like laundry..."

I tried this, but the wife complained about the noise, and the corners of the chassis came out bent, never mind the scratches inside the dryer.  
TNX, MD

From k7sz at live.com Sat Feb 9 21:23:29 2013  
From: k7sz at live.com (Rich Arland)  
Date: Sat, 9 Feb 2013 21:23:29 -0500  
Subject: [BoatAnchors] Drake AC-4 PSU needed  
Message-ID: <BLU172-W33C78969CF9AD01A4F46B4F60B0@phx.gbl>

Does anyone on this list have a Drake AC-4 PSU they want to off-load?

If so, pls contact me off-list.

Tnx es 73

Rich Arland, K7SZ  
Dacula, GA

From bluegrassdakine at hotmail.com Sun Feb 10 11:20:19 2013  
From: bluegrassdakine at hotmail.com (Raymond Cote)  
Date: Sun, 10 Feb 2013 10:20:19 -0600  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
In-Reply-To: <729B392B-87C0-4452-AF04-68A305541869@yahoo.com>  
References: <BLU403-EAS344CE121279D600F735E64298050@phx.gbl>  
<05b501ce05ad\$667137a0\$3353a6e0\$@frontiernet.net>  
<3573C2A9-1963-4E10-92D7-52A721EC8F79@gmail.com>  
<BC6E928C-A170-4CF8-94CC-3238A52C5D14@yahoo.com>  
<476D1661-3FF9-423C-920B-B47E4AB8CC0D@comcast.net>  
<729B392B-87C0-4452-AF04-68A305541869@yahoo.com>  
Message-ID: <BAY401-EAS241A187983F2E06BBA8D443A90B0@phx.gbl>

WHAT WERE THE RECOMMENDATIONS FOR CLEANING?

I saw very little on this topic posted to the group and many of us have Collins gear. Perhaps the default "reply" should be to ALL unless sp ecocide recipient is selected. I miss over half of the answers to questions I am interested in.

"Plus ca change, plus c'est la meme chose"

On Feb 9, 2013, at 22:34, "Roberto Salazar" <ys1rs at yahoo.com> wrote:

- > Guys thanks to all who replied.
- > Cleaning was done.
- > Learnt a lot today.
- > Opened the 30L-1 and found a couple of problems in it.
- > -Electrolytics have perforations.
- > -a cable underneath the circuit board, a shielded thick cable is broken (looks green inside so I believe it rusted out and cut out by itself),
- > -811A tubes seems to be OK but I have no provision to test those tubes, my friend's tube tester is only meant for small tubes.
- > -got a manual from BAMA. A military one.
- > -the meter's glass was loose out of place. Fixed it and should work fine now.

> Man, that last meter nut was a pain to put in place! Faintly made it. It was like joining a capillary vein using micro surgery.

> -will require a rebuild Kit. Have found one at Harbach.

>

> Once I open it for board replacement will clean it thoroughly with attention to detail.

>

> Thanks again.

>

> 73 de Rob.

> YS1RS

>

> Sent from my iPad

>

> On Feb 9, 2013, at 22:07, jdbf918 at comcast.net wrote:

>

>> P.S. I have not done that kind of cleaning on the 30L1 yet. Can not attest to that unit.

>> Regards,

>> Bill

>> K1BZM

>>

>> Sent from my iPhone

>>

>> On Feb 9, 2013, at 4:51 PM, Roberto Salazar <ys1rs at yahoo.com> wrote:

>>

>>> Guys.

>>> I need to clean the surface of the board (where the tubes are located) of my recently acquired KWM-2 which was on storage for years from the previous owner.

>>> Dust for years has accumulated on the chassis and has stick there with the help of humidity, not coming out even with compressed air. Have used a brush but same thing.

>>> I need something more aggressive

>>> Underneath the aluminum chassis, where the point to point wiring is located, everything is very clean so no need to clean that much in there.

>>> I'm new to Collins as you all know so have decided to ask first.

>>>

>>> Have seen a YouTube video of a guy who takes advantage of the fact the radio chassis is aluminum, so he washes it with a hose and Simple Green, but that is too extreme for a newcomer as that approach will require deep re-alignment (we do have Simple Green here in YS too).

>>>

>>> What have you used or would recommend?

>>> Will do the same with the VFO and the 30L-1.

>>> Just received the first capacitors to rebuild the Power supply. Still missing the 0.05uF cap.

>>> The 30L-1 will need a rebuild kit too.

>>> So, I'm having fun fixing this beauty back to operation step by step. :)

```

>>> Love to work on my radio!
>>>
>>> Rob
>>>
>>>
>>> -----
>>> SHARE THE FUN: JOIN THE COLLINS COLLECTORS ASSOCIATION TODAY !
>>> http://www.collinsradio.org/?page\_id=37
>>>
>>> NETS: Tues & Thur: 3.805 MHz-2000 Central + Fri: 3.895 MHz-2000 Pacific
>>> SUNDAYS: 14.263 MHz-2000 UTC + AM Net: 29.050 MHz-1200 Central
>>> 1st Wednesday AM Net 3.880 MHz-2000 local (ET, CT, MT, PT)
>>>
>>> The Collins Reflector reserves the right to refuse access to anyone.
>>>
>>> LIST HELP? ADMIN EMAIL: collins-owner at listserve.com
>>> This ONLY goes to the list admins and does not post to the group!
> -----
> SHARE THE FUN: JOIN THE COLLINS COLLECTORS ASSOCIATION TODAY !
> http://www.collinsradio.org/?page\_id=37
>
> NETS: Tues & Thur: 3.805 MHz-2000 Central + Fri: 3.895 MHz-2000 Pacific
> SUNDAYS: 14.263 MHz-2000 UTC + AM Net: 29.050 MHz-1200 Central
> 1st Wednesday AM Net 3.880 MHz-2000 local (ET, CT, MT, PT)
>
> The Collins Reflector reserves the right to refuse access to anyone.
>
> LIST HELP? ADMIN EMAIL: collins-owner at listserve.com
> This ONLY goes to the list admins and does not post to the group!

```

```

From gumbear at pacbell.net Sun Feb 10 14:56:54 2013
From: gumbear at pacbell.net (Arden Allen)
Date: Sun, 10 Feb 2013 11:56:54 -0800
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?
References: <BLU403-EAS344CE121279D600F735E64298050@phx.gbl><05b501ce05ad$667137a0$3353a6e0$@frontiernet.net><3573C2A9-1963-4E10-92D7-52A721EC8F79@gmail.com><BC6E928C-A170-4CF8-94CC-3238A52C5D14@yahoo.com><476D1661-3FF9-423C-920B-B47E4AB8CC0D@comcast.net><729B392B-87C0-4452-AF04-68A305541869@yahoo.com>
<BAY401-EAS241A187983F2E06BBA8D443A90B0@phx.gbl>
Message-ID: <000a01ce07c8$cc5a80e0$4301a8c0@KB6NAX>

```

```

> .....
> .....The best way to clean a Collins board? .....

```

For the sake of clarity I'll define "best way." The best way to clean an

insulating substrate (circuit boards, etc.) is the same as a doctor's Hippocratic oath, which is to do no harm. Once a board is deemed "clean" there remains the question, was any contamination left behind that degrades the insulating quality of the board material? The answer can be considered to be always "yes." That's because no cleaner on earth will remove every molecule of soil from a board, nor will any cleaner on earth be itself completely rinsed from the board. What one should strive for is the least harmful cocktail of contaminants be left behind. Except for hermetic materials (glass, glazed ceramic) insulators will absorb into their pores some of the contaminants. The contaminants will increase surface and subsurface leakage which will cause problems for extremely high impedance circuits, boards exposed to a powerful EMF field or high temperatures will more readily "cook," and boards exposed to high voltage are prone to tracking which leads to burning and shorting between terminals on the board.

That mouthful said I'm concerned by some of the recommendations tossed into the good advice hat. A circuit board containing low voltage and moderate to low impedance circuits can be successfully cleaned with Mom's favorite cleaning solution with no regrets down the log except maybe a bit of green corrosion here and there years hence. The more critical the role an insulator is required to perform requires a more critical examination of what will be the least harmful "best" cleaning method.

If the List wants to expand on this subject it will be most helpful for members if we talk about the types of soils found on circuit boards and what are the appropriate cleaning materials and methods. To give an example of one type of consideration, a circuit board containing cathode ray tube high voltage power supply components is best brush washed with WD40, with no rinse, just mechanical removal of dirt and excess oily residue. OK, you guys, take it from here.....

Arden Allen  
KB6NAX

I love a dog. He does nothing for political reasons.  
-Will Rogers

From thompson at mindspring.com Tue Feb 12 18:10:36 2013  
From: thompson at mindspring.com (David Thompson)  
Date: Tue, 12 Feb 2013 18:10:36 -0500  
Subject: [BoatAnchors] HQ-129S spotted at used furniture store  
Message-ID: <00a601ce0976\$9080bcb0\$2e5e4d0c@yourxb2x7j77gn>

The wife told me she and our daughter saw a Hammarlund receiver at a used furniture store on Buford Highway just inside I-285 in Chamblee, GA (Atlanta area).

I went by there today and it was a HQ-129X that was in sad condition. A knob was missing and the main and bandspread knobs were incorrect. There was paint

speckled on the lid and several items on the lid itself. I took them off and looked inside and it was dirty and would require a complete cleaning. The AC plug seemed original but the end was black. The store wanted \$100 and I told them that was too high for the condition.

Around the corner from the HQ-129X was an RCA Floor console. The outside could be cleaned up and the dials seemed to work. Could not look inside. They wanted \$80 so again I passed.

73 Dave K4JRB

From mike at oldaudio.net Tue Feb 12 19:03:09 2013  
From: mike at oldaudio.net (Mike Durff)  
Date: Tue, 12 Feb 2013 16:03:09 -0800 (PST)  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
Message-ID: <1360713789.6686.YahooMailClassic@web5712.biz.mail.ne1.yahoo.com>

Arden said:

"...To give an example of one type of consideration, a circuit board containing cathode ray tube high voltage power supply components is best brush washed with WD40, with no rinse, just mechanical removal of dirt and excess oily residue.? OK, you guys, take it from here....."

I will omit the word "Collins" as I would think this and other cleaning procedures would apply to all? RF devices where one might encounter HV, LV & RF.

In response to Arden, I would think that one would need to define "dirt". 40 years ago, when there weren't as many ICs' and electronics were mostly analog and tube based, we would usually take the unit outside the shop and give it a good dusting with 60psi air or less. Possibly using a dry brush to help things along.

In my particular case, I am restoring a HB rig that I have had in storage for 20 years. I estimate the date of original build in the 1940's. (7ft rack, PP 808 finals, open wire feed insulators coming out the top)? Don't know how long it was in storage before that.

What dirt & dust has accumulated over the years has been further cemented to the chassis with the help of mouse urine. IMHO I would think WD-40 and a brush with no rinse would be the worst case, and leave a gooey mess.

Someone had suggested 409/ammonia mixture. I would think that ammonia would not be a good thing for electronics as ammonia is caustic.

Another person suggested pressurized water i.e. household garden sprayer and blow dry with leaf blower, & let the unit sit for several days in a space where the humidity level is below 50% to let it dry completely. IMHO I think this is the best choice...in my case. A weak solution 1% of TSP in a sprayer may be a less



caustic choice than Ammonia. Simple green may be even better yet...YMMV  
Thanks, Mike Durff  
PS: I will report what I did and how it came out later...

From spr at earthlink.net Tue Feb 12 19:22:36 2013  
From: spr at earthlink.net (spr at earthlink.net)  
Date: Tue, 12 Feb 2013 16:22:36 -0800 (GMT-08:00)  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
Message-ID: <6015202.1360714957321.JavaMail.root@elwamui-hybrid.atl.sa.earthlink.net>

Hi Mike,

I would advise against ANY cleaner with solid residue. For water-based contaminants such as yours, use windex, which is close to a zero dissolved solids material. Point is, the solid residue will be conductive after the cleaning, which ain't a good outcome. Soap residues are also corrosive, so your nice, clean chassis will rust rapidly if any cleaner residues are left behind.

I'd also rinse with DISTILLED water, several times, to remove as many of the solids as you can.

I wish I had kept the photos, but some years ago a guy with a hot/wet environmental chamber at work did a very instructive experiment. He bought a bunch (maybe 40) of plated electrical box covers and washed them with 40 or so different household cleaning products. He then rinsed them all.

He then additionally rinsed HALF of each cover thoroughly with distilled water and put them in the chamber for a month. Note: A month is shorter than a Southern summer, as I understand the matter, so this is a realistic test.

After that month, the half of each cover that had not been rinsed with distilled water was quite corroded; the rinsed halves fared much better.

This is why I suggest wht I do.

Regards,

Scott

-----Original Message-----

>From: Mike Durff <mike at oldaudio.net>  
>Sent: Feb 12, 2013 4:03 PM  
>To: boatanchors at theporch.com

>Subject: Re: [BoatAnchors] {Collins} The best way to clean a Collins board?  
>  
>Arden said:  
>"...To give an example of one type of consideration, a circuit board containing  
cathode ray tube high voltage power supply components is best brush washed with  
WD40, with no rinse, just mechanical removal of dirt and excess oily residue.? OK,  
you guys, take it from here....."  
>  
>I will omit the word "Collins" as I would think this and other cleaning  
procedures would apply to all? RF devices where one might encounter HV, LV & RF.  
>  
>In response to Arden, I would think that one would need to define "dirt". 40  
years ago, when there weren't as many ICs' and electronics were mostly analog and  
tube based, we would usually take the unit outside the shop and give it a good  
dusting with 60psi air or less. Possibly using a dry brush to help things along.  
>  
>In my particular case, I am restoring a HB rig that I have had in storage for 20  
years. I estimate the date of original build in the 1940's. (7ft rack, PP 808  
finals, open wire feed insulators coming out the top)? Don't know how long it was  
in storage before that.  
>What dirt & dust has accumulated over the years has been further cemented to the  
chassis with the help of mouse urine. IMHO I would think WD-40 and a brush with no  
rinse would be the worst case, and leave a gooey mess.  
>  
>Someone had suggested 409/ammonia mixture. I would think that ammonia would not  
be a good thing for electronics as ammonia is caustic.  
>Another person suggested pressurized water i.e. household garden sprayer and blow  
dry with leaf blower, & let the unit sit for several days in a space where the  
humidity level is below 50% to let it dry completely. IMHO I think this is the  
best choice...in my case. A weak solution 1% of TSP in a sprayer may be a less  
caustic choice than Ammonia. Simple green may be even better yet...YMMV  
>Thanks, Mike Durff  
>PS: I will report what I did and how it came out later...  
>  
>  
>-----  
>BoatAnchors mailing list  
>BoatAnchors at theporch.com  
><https://minime.theporch.com/mailman/listinfo/boatanchors>

From 1oldlens1 at ix.netcom.com Tue Feb 12 21:09:18 2013  
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)  
Date: Tue, 12 Feb 2013 18:09:18 -0800  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
References: <6015202.1360714957321.JavaMail.root@elwamui-  
hybrid.atl.sa.earthlink.net>

Message-ID: <3DEA295934504946B53113BABA933B54@VALUED20606295>

----- Original Message -----

From: <spr at earthlink.net>

To: <boatanchors at theporch.com>

Sent: Tuesday, February 12, 2013 4:22 PM

Subject: Re: [BoatAnchors] {Collins} The best way to clean a Collins board?

> Hi Mike,

>

> I would advise against ANY cleaner with solid residue. For  
> water-based contaminants such as yours, use windex, which  
> is close to a zero dissolved solids material. Point is,  
> the solid residue will be conductive after the cleaning,  
> which ain't a good outcome. Soap residues are also  
> corrosive, so your nice, clean chassis will rust rapidly  
> if any cleaner residues are left behind.

>

> I'd also rinse with DISTILLED water, several times, to  
> remove as many of the solids as you can.

>

> I wish I had kept the photos, but some years ago a guy  
> with a hot/wet environmental chamber at work did a very  
> instructive experiment. He bought a bunch (maybe 40) of  
> plated electrical box covers and washed them with 40 or so  
> different household cleaning products. He then rinsed them  
> all.

>

> He then additionally rinsed HALF of each cover thoroughly  
> with distilled water and put them in the chamber for a  
> month. Note: A month is shorter than a Southern summer, as  
> I understand the matter, so this is a realistic test.

>

> After that month, the half of each cover that had not been  
> rinsed with distilled water was quite corroded; the rinsed  
> halves fared much better.

>

> This is why I suggest what I do.

>

> Regards,

>

> Scott

>

Our standard method of cleaning at Hewlett-Packard  
many years ago was to wash equipment using dishwashing

detergent in a paint spray gun with warm water. First step is rinse the equipment with plain warm water, then spray out thoroughly with the detergent, then rinse again and bake dry at about 130F for a few days. You can use a diluted solution of the detergent with a brush in place of the spray gun. Circuit boards should clean up pretty well. When done correctly this method leaves no residue and the detergent will not dissolve any thing used in electronics. I do suggest removing any meters components with paper in them like coils on paper formers and also sealed transformers. The reason for the latter is that we found that a lot of supposedly hermetically sealed transformers would actually allow some moisture to get in which would not come back out even with a long bake. Open frame or bell-end transformers are fine since they will dry out.

Edge contacts can be cleaned with Deoxit and a toothbrush. Same for Molex and similar connectors.

I am not at all sure what is in Formula-409 and Fantastic, the MSDS are not very enlightening and look pretty much the same. Note that there are two kinds of glass cleaner available: the older kind like plain Windex, are mostly ammonium hydroxide and isopropyl alcohol, the newer "streak free" type uses some form of butyl alcohol and does not usually have ammonia in it. Ammonium hydroxide is quite high in pH (alkaline) but is also pretty diluted in glass cleaner. Kodak, and others, used ammonium carbonate in their lens cleaner because it is lower in pH and less likely to dissolve optical glass than the hydroxide. However, I've used Windex on a lot of lenses without any indication that caused damage.

--

Richard Knoppow  
Los Angeles  
WB6KBL  
dickburk at ix.netcom.com

From gumbear at pacbell.net Tue Feb 12 23:25:27 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Tue, 12 Feb 2013 20:25:27 -0800  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
References: <6015202.1360714957321.JavaMail.root@elwamui-hybrid.atl.sa.earthlink.net>  
Message-ID: <003601ce09a3\$dc498cd0\$4301a8c0@KB6NAX>

> .....After that month, the half of each cover that had not been rinsed with distilled water was quite corroded; the rinsed halves fared much better. ....

Scott, what should follow that type of cleanup procedure would be the application of what I'll call a surface protector that excludes moisture. Again, WD-40 comes to mind although a thinned coating of acrylic laquer would also seal pores and capture contaminants and is not sticky when dry. There are very effective electronics conformal coatings available for purchase.

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

From gumbear at pacbell.net Tue Feb 12 23:37:24 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Tue, 12 Feb 2013 20:37:24 -0800  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
References: <6015202.1360714957321.JavaMail.root@elwamui-hybrid.atl.sa.earthlink.net>  
<3DEA295934504946B53113BABA933B54@VALUED20606295>  
Message-ID: <003701ce09a3\$dcfde8b0\$4301a8c0@KB6NAX>

> .....Open frame or bell-end transformers are fine since they will dry out. ....

I would say, Rich, your dry-out procedure at HP must have been very effective to be able to drive all of the moisture out of open frame and bell end transformers. As I don't have a regulated temperature chamber to reliably dry out equipment I prefer to remove transformers and clean their surfaces by hand. I only wash equipment early in the morning on a day that 01' Sol is out to do the job.

Arden Allen  
KB6NAX

From gumbear at pacbell.net Tue Feb 12 23:16:40 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Tue, 12 Feb 2013 20:16:40 -0800

Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
References: <1360713789.6686.YahooMailClassic@web5712.biz.mail.ne1.yahoo.com>  
Message-ID: <003401ce09a3\$d6ed53c0\$4301a8c0@KB6NAX>

> ....In response to Arden, I would think that one would need to define "dirt". 40 years ago, when there weren't as many ICs' and electronics were mostly analog and tube based, we would usually take the unit outside the shop and give it a good dusting with 60psi air or less. Possibly using a dry brush to help things along. ....

> .....What dirt & dust has accumulated over the years has been further cemented to the chassis with the help of mouse urine. IMHO I would think WD-40 and a brush with no rinse would be the worst case, and leave a gooey mess. ....

Good points, Mike. First define the type of dirt. Then define the type of cleanup process that is compatible with the subject circuitry. WD-40 is friendly to HV circuits causing least degradation of insulation but messy for lower voltage compact circuitry that water based washing would be appropriate for with a detergent that is appropriate for electronics and corrosion prone metals.

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

From spr at earthlink.net Wed Feb 13 01:42:33 2013  
From: spr at earthlink.net (Scott Robinson)  
Date: Tue, 12 Feb 2013 22:42:33 -0800  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
In-Reply-To: <003601ce09a3\$dc498cd0\$4301a8c0@KB6NAX>  
References: <6015202.1360714957321.JavaMail.root@elwamui-hybrid.atl.sa.earthlink.net>  
<003601ce09a3\$dc498cd0\$4301a8c0@KB6NAX>  
Message-ID: <511B35D9.8020601@earthlink.net>

Hi Arden,

Yes, sometimes a conformal coating is useful, but the very first thing to do is to rinse off \*all\* the solid residues, whether urea from mouse urine or soaps from cleaning agents. Then you seal the surface.

/scott

On 2/12/13 8:25 PM, Arden Allen wrote:

>> .....After that month, the half of each cover that had not been rinsed  
> with distilled water was quite corroded; the rinsed halves fared much  
> better. ....

>

> Scott, what should follow that type of cleanup procedure would be the  
> application of what I'll call a surface protector that excludes moisture.  
> Again, WD-40 comes to mind although a thinned coating of acrylic laquer  
> would also seal pores and capture contaminants and is not sticky when dry.  
> There are very effective electronics conformal coatings available for  
> purchase.

>

> Arden Allen  
> KB6NAX

>

> Adopt a shelter dog,  
> save an innocent life,  
> and make a friend forever =:-)

>

>

From dxguy at earthlink.net Wed Feb 13 02:28:56 2013

From: dxguy at earthlink.net (don davis)

Date: Tue, 12 Feb 2013 23:28:56 -0800

Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?

In-Reply-To: <1360713789.6686.YahooMailClassic@web5712.biz.mail.ne1.yahoo.com>

References: <1360713789.6686.YahooMailClassic@web5712.biz.mail.ne1.yahoo.com>

Message-ID: <009a01ce09bb\$d55c8db0\$8015a910\$@earthlink.net>

In the aerospace business we used to use 1, 1, 1 TCE, Cobine, Freon, Akorel, and other electronic solvents for CCA cleaning. Worked great, but most are illegal now. IPA 91% followed by 3 DI water rinses is the current technology for hand wash - with gentle brushing.

73 de don ad6pb

-----Original Message-----

From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Mike Durff

Sent: Tuesday, February 12, 2013 4:03 PM

To: boatanchors at theporch.com

Subject: Re: [BoatAnchors] {Collins} The best way to clean a Collins board?

Arden said:

"...To give an example of one type of consideration, a circuit board

containing cathode ray tube high voltage power supply components is best brush washed with WD40, with no rinse, just mechanical removal of dirt and excess oily residue.? OK, you guys, take it from here....."

I will omit the word "Collins" as I would think this and other cleaning procedures would apply to all? RF devices where one might encounter HV, LV & RF.

In response to Arden, I would think that one would need to define "dirt". 40 years ago, when there weren't as many ICs' and electronics were mostly analog and tube based, we would usually take the unit outside the shop and give it a good dusting with 60psi air or less. Possibly using a dry brush to help things along.

In my particular case, I am restoring a HB rig that I have had in storage for 20 years. I estimate the date of original build in the 1940's. (7ft rack, PP 808 finals, open wire feed insulators coming out the top)? Don't know how long it was in storage before that.

What dirt & dust has accumulated over the years has been further cemented to the chassis with the help of mouse urine. IMHO I would think WD-40 and a brush with no rinse would be the worst case, and leave a gooey mess.

Someone had suggested 409/ammonia mixture. I would think that ammonia would not be a good thing for electronics as ammonia is caustic. Another person suggested pressurized water i.e. household garden sprayer and blow dry with leaf blower, & let the unit sit for several days in a space where the humidity level is below 50% to let it dry completely. IMHO I think this is the best choice...in my case. A weak solution 1% of TSP in a sprayer may be a less caustic choice than Ammonia. Simple green may be even better yet...YMMV Thanks, Mike Durff  
PS: I will report what I did and how it came out later...

---

BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From cacutts at mindspring.com Wed Feb 13 04:39:08 2013  
From: cacutts at mindspring.com (Allen Cutts)  
Date: Wed, 13 Feb 2013 16:39:08 +0700 (GMT+07:00)  
Subject: [BoatAnchors] (no subject)  
Message-ID: <14730403.1360748348887.JavaMail.root@mswamui-chipeau.atl.sa.earthlink.net>

<http://leshordeuxheureux.org/users/>



70Work%20staying%20at%20home%203-4%20hours%20a%20day6

From mike at oldaudio.net Wed Feb 13 13:10:12 2013  
From: mike at oldaudio.net (Mike Durff)  
Date: Wed, 13 Feb 2013 10:10:12 -0800 (PST)  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
Message-ID: <1360779012.94683.YahooMailClassic@web5719.biz.mail.ne1.yahoo.com>

Don said:

"In the aerospace business we used to use 1, 1, 1 TCE..."

Ah, yes, the good old days...

Methinks, in the end, this will be air/vac & mechanical removal, followed by some mild detergent, followed by an IPA rinse. Then tent the whole rig with a dehumidifier for a week or so. YMMV  
Mike

From wb3fau55 at neo.rr.com Wed Feb 13 18:41:19 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Wed, 13 Feb 2013 18:41:19 -0500  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
In-Reply-To: <009a01ce09bb\$d55c8db0\$8015a910\$@earthlink.net>  
Message-ID: <20130213234120.LT24M.141065.root@cdptpa-web03-z01>

put it in the dishwasher and let dry in the sun...

---- don davis <dxguy at earthlink.net> wrote:

> In the aerospace business we used to use 1, 1, 1 TCE, Cobine, Freon, Akorel,  
> and other electronic solvents for CCA cleaning. Worked great, but most are  
> illegal now. IPA 91% followed by 3 DI water rinses is the current technology  
> for hand wash - with gentle brushing.

>

> 73 de don ad6pb

>

> -----Original Message-----

> From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of  
> Mike Durff

> Sent: Tuesday, February 12, 2013 4:03 PM

> To: boatanchors at theporch.com

> Subject: Re: [BoatAnchors] {Collins} The best way to clean a Collins board?

>

> Arden said:

> "...To give an example of one type of consideration, a circuit board  
> containing cathode ray tube high voltage power supply components is best  
> brush washed with WD40, with no rinse, just mechanical removal of dirt and  
> excess oily residue.? OK, you guys, take it from here....."  
>  
> I will omit the word "Collins" as I would think this and other cleaning  
> procedures would apply to all? RF devices where one might encounter HV, LV &  
> RF.  
>  
> In response to Arden, I would think that one would need to define "dirt". 40  
> years ago, when there weren't as many ICs' and electronics were mostly  
> analog and tube based, we would usually take the unit outside the shop and  
> give it a good dusting with 60psi air or less. Possibly using a dry brush to  
> help things along.  
>  
> In my particular case, I am restoring a HB rig that I have had in storage  
> for 20 years. I estimate the date of original build in the 1940's. (7ft  
> rack, PP 808 finals, open wire feed insulators coming out the top)? Don't  
> know how long it was in storage before that.  
> What dirt & dust has accumulated over the years has been further cemented to  
> the chassis with the help of mouse urine. IMHO I would think WD-40 and a  
> brush with no rinse would be the worst case, and leave a gooey mess.  
>  
> Someone had suggested 409/ammonia mixture. I would think that ammonia would  
> not be a good thing for electronics as ammonia is caustic.  
> Another person suggested pressurized water i.e. household garden sprayer and  
> blow dry with leaf blower, & let the unit sit for several days in a space  
> where the humidity level is below 50% to let it dry completely. IMHO I think  
> this is the best choice...in my case. A weak solution 1% of TSP in a sprayer  
> may be a less caustic choice than Ammonia. Simple green may be even better  
> yet...YMMV Thanks, Mike Durff  
> PS: I will report what I did and how it came out later...  
>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From johnmb at nc.rr.com Wed Feb 13 19:23:31 2013  
From: johnmb at nc.rr.com (john)

Date: Wed, 13 Feb 2013 19:23:31 -0500

Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?

In-Reply-To: <20130213234120.LT24M.141065.root@cdptpa-web03-z01>

References: <009a01ce09bb\$d55c8db0\$8015a910\$@earthlink.net>

<20130213234120.LT24M.141065.root@cdptpa-web03-z01>

Message-ID: <6.2.1.2.2.20130213192154.03e5ccc0@pop-server.nc.rr.com>

Slowly, and carefully in order to avoid damage, observe what condition your radio is in and enjoy the process.

If you're in a big hurry, perhaps it's the wrong hobby?

: -)

John K5M0

From arc5 at ix.netcom.com Wed Feb 13 19:33:17 2013

From: arc5 at ix.netcom.com (David Stinson)

Date: Wed, 13 Feb 2013 18:33:17 -0600

Subject: [BoatAnchors] Using Programmable Oscillators in Boatanchors

Message-ID: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>

I have several WWII sets that need crystals to operate. Finding "old stock" can take a very long time and purchasing them "new" from the few remaining suppliers is prohibitively expensive. So.... alternatives.

I'm an advocate of leaving WWII equipment "operating as designed," meaning that limited changes that are 100% reversible which allow the unit to live are OK. So I've often thought of "Borg Implants" like my simple converter to get them going.

My rare SCR-274N VHF set needs crystals, especially for the BC-942 ( ARC-5 R-28 ) receiver. Programmable oscillators in both TTL and CMOS format set for any frequency one would wish are cheap and plentiful. So I decided to try them out.

The BC-942 / R-28 uses a 12SH7 as an Electron Coupled Oscillator / Quadrupler. When using a regular crystal, I scoped 3 V P-T-P at the cathode.

I had a couple of older can-type TTL output clock oscillator units for 4.000 MC, which puts the set on 102.9 mHz. I powered the oscillator with a old, weak 6 Volt battery.

Under load, the battery sourced 5.3 Volts for Vdd.

Driving the osc. straight into the stage (with a blocking cap) did not develop enough drive voltage, so I wound a little 4:1 UNUN and this developed 2 V P-T-P at the cathode, which appears to be just enough because the set came right up and played. I think a 9:1 UNUN will do better.

Next, I ordered four Epson programmable oscillators from Digikey: 4.652, 4.829, 5.722 and 5.818 mHz. There are probably better ones out there, but I picked this one because it was a through-hole package and \*cheap\* ;-)

<http://www.doveonline.com/pdfs/SG8002DB.pdf>

I ordered them pre-programmed from Digikey and they arrived in just a couple of days. Less than \$18 for four channels - less than half the price of a single "new" crystal.

Of course, the first thing I did was hook the blasted battery up \*backwards.\*

A little smoke sword shot out of the middle of the chip and it disemboweled itself..... "YAAAAAA!"

So much for the very active 118.55 MC

DFW airport departure freq.....

When I quit banging my head on the floor, I connected a survivor correctly and tried again. The output of this chip would not work into an UNUN, but for a wonder, it drove the 12SH7 directly (with the DC blocking cap, of course) and developed the 2 Volts drive needed. I'm listening to the Unicoms on 122.8 right now. If the "jitter" is causing a problem, I can't hear it. Sounds like airplanes to me ;-)  
Here's what it looks like "haywired" in.  
I'll make a nice little circuit board for each later:

<http://home.netcom.com/~arc5/ItWorks.jpg>

This CMOS chip outputs about Vdd - .4V and it can be Vdd up to 7 volts, which would give me more drive. I'll build a little regulator to supply all four boards with 6.75 V and that should do it.  
Here's a diagram of what's going on:

<http://home.netcom.com/~arc5/ItWorks2.jpg>

Next step- will it work in the BC-950 transmitter?

73 DE Dave AB5S

From arc5 at ix.netcom.com Wed Feb 13 19:55:01 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Wed, 13 Feb 2013 18:55:01 -0600  
Subject: [BoatAnchors] Using Programmable Oscillators - Idea  
In-Reply-To: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
References: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
Message-ID: <E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>

Just had one of them dim bulbs go off in the  
dark and windy caverns between my ears....

The BC-942 (R-28) receives 100-155 MC  
with an IF of 6.9 MC.  
Since the 12SH7 is, in effect, an untuned Pierce  
xtal oscillator followed by a Quadrupler,  
the output of this stage is tunable from 15.5 to 18.5 MC.

Since these little oscillators can be programmed for  
these higher freqs, if I ordered those wouldn't  
they drive the stage more efficiently?

73 D.S.

From wf2u at ws19ops.com Wed Feb 13 20:11:34 2013  
From: wf2u at ws19ops.com (Meir WF2U)  
Date: Wed, 13 Feb 2013 20:11:34 -0500  
Subject: [BoatAnchors] [ARC5] Using Programmable Oscillators - Idea  
In-Reply-To: <E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>  
References: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
<E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>  
Message-ID: <B0668E7066B94366A2C1ECBF2FA04DB7@MBDCONSULTING.LOCAL>

David,

This is very interesting (and exciting...). These little buggers then can be  
experimented with to take the place of crystals which (I'd have to order for  
much more money than these chips) in the Collins 18S-4 and the 618S-1  
aircraft HF transceivers I'm planning to put on the air. These rigs  
presently are populated with useless (for amateur purposes) aeronautical  
frequency crystals.

Thanks for publishing your experience with these programmable oscillators!

73, Meir WF2U  
Landrum, SC

-----Original Message-----

From: arc5-bounces at mailman.qth.net [mailto:arc5-bounces at mailman.qth.net] On Behalf Of David Stinson  
Sent: Wednesday, February 13, 2013 7:55 PM  
To: ARC-5 List; milsurplus at mailman.qth.net; boatanchors at theporch.com  
Subject: Re: [ARC5] Using Programmable Oscillators - Idea

Just had one of them dim bulbs go off in the  
dark and windy caverns between my ears....

The BC-942 (R-28) receives 100-155 MC  
with an IF of 6.9 MC.  
Since the 12SH7 is, in effect, an untuned Pierce  
xtal oscillator followed by a Quadrupler,  
the output of this stage is tunable from 15.5 to 18.5 MC.

Since these little oscillators can be programmed for  
these higher freqs, if I ordered those wouldn't  
they drive the stage more efficiently?

73 D.S.

---

ARC5 mailing list

Home: <http://mailman.qth.net/mailman/listinfo/arc5>

Help: <http://mailman.qth.net/mmfaq.htm>

Post: <mailto:ARC5 at mailman.qth.net>

This list hosted by: <http://www.qsl.net>

Please help support this email list: <http://www.qsl.net/donate.html>

From k1lky at earthlink.net Wed Feb 13 20:48:51 2013  
From: k1lky at earthlink.net (Roy Morgan)  
Date: Wed, 13 Feb 2013 20:48:51 -0500  
Subject: [BoatAnchors] Using Programmable Oscillators in Boatanchors  
In-Reply-To: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
References: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
Message-ID: <67F44465-8D34-406F-8E93-E51309984091@earthlink.net>

On Feb 13, 2013, at 7:33 PM, David Stinson wrote:

> ... I've often thought of "Borg Implants" like my simple converter  
> to get them going.

Dave,

Good on ya!

May I remind you that some folks my (our?) age have modern stainless steel and synthetic parts such as hips and knees. They keep the ole' things going!

Roy

Roy Morgan  
k1lky at earthlink.net  
K1LKY Since 1958 - Keep 'em Glowing!

From arc5 at ix.netcom.com Wed Feb 13 21:15:32 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Wed, 13 Feb 2013 20:15:32 -0600  
Subject: [BoatAnchors] Programmable Oscillators - Redux  
In-Reply-To: <E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>  
References: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
<E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>  
Message-ID: <DA893915C51D4AF6A2F238AD56B06575@CompaqSR5710F>

OK hold on there a minute- these ideas jus' keeps cooking.

I turned everything off and went inside to have dinner with my sweetie babies. Then went back out and..... it didn't work.

I looked at the drive from the little CMOS oscillators.  
Still at 2 P-T-P on the Osc. cathode.  
Xtals give 3 Volts. I guess this just isn't quite enough to be reliable.  
So I decided to swipe the 4:1 UNUN from the TTL Osc. and try again. If you remember, the CMOS oscillators won't drive the UNUN primary directly- it's a DC thing- so I put another blocking cap on the output. Just happened to grab 680 pFd because it was laying on the bench. With the voltage step-up of the UNUN, the cathode is up to 3 V P-T-P and the receiver is back alive.

Going to wind a 9:1 tomorrow after work and see how that does.

73 DE Dave AB5S

From gumbear at pacbell.net Wed Feb 13 21:22:28 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Wed, 13 Feb 2013 18:22:28 -0800  
Subject: [BoatAnchors] Using Programmable Oscillators - Idea  
References: <6A5AE24BAFAA4AA691FB121C0449B01E@CompaqSR5710F>  
<E9F72DBE2C8142B0AABF9AF56A36E5E9@CompaqSR5710F>  
Message-ID: <000f01ce0a5a\$26a1b7b0\$4301a8c0@KB6NAX>

> .....Since these little oscillators can be programmed for  
these higher freqs, if I ordered those wouldn't  
they drive the stage more efficiently?

Keeping the tripler in line may be beneficial for harmonic suppression but  
only a spectrum analyzer could tell you if one way is better than the other.

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

From arc5 at ix.netcom.com Thu Feb 14 12:32:48 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Thu, 14 Feb 2013 11:32:48 -0600  
Subject: [BoatAnchors] WWII Tower LF Transmitter Models- Info??  
Message-ID: <75B853DD0D13457DAA15E63245A6FDD1@CompaqSR5710F>

An historical restoration group is seeking specific information  
on the longwave "LF" transmitters used in WWII towers.  
Established towers (vs. "on the fly" towers nearer the front")  
among other comm systems,  
were almost always outfitted for an "LF up, HF down" system.  
This was also common in civilian airports from the late '20s  
all the way into the early '60s and longer overseas.  
Most widely used pair was Tower on 278KC and  
aircraft on 3105 or 6210 KC.

Specifically, they need to know what type of LF transmitter  
might have been found in a WWII Army Air Corps tower



in Europe? My sectionals show almost all of them had an LF transmitter, but of course it doesn't say what model it was.

I expect the actual LF transmitter would have been located remotely, under the "Crow's Foot" or similar LF antenna and the transmitter operated via wireline. If you have information on that, they would need the specific equipment used to remote the transmitter.

The idea is to outfit a WWII ETO tower as authentically as possible. I can help them with HF/VHF Command and Liaison, but I have no good info on the LF transmit configuration.

TNX OM ES 73 DE Dave AB5S

73 DE Dave AB5S

From arc5 at ix.netcom.com Thu Feb 14 13:26:00 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Thu, 14 Feb 2013 12:26:00 -0600  
Subject: [BoatAnchors] [ARC5] WWII Tower LF Transmitter Models- Info??  
In-Reply-To: <CAG9SHKMTriXitTRZ9j==eJ+30L+VokqzxJmJguNbSBN\_6qeaDw@mail.gmail.com>  
References: <75B853DD0D13457DAA15E63245A6FDD1@CompaqSR5710F>  
<CAG9SHKMTriXitTRZ9j==eJ+30L+VokqzxJmJguNbSBN\_6qeaDw@mail.gmail.com>  
Message-ID: <E4DED6D256A24076A8442354ECD36D2C@CompaqSR5710F>

Thank you, Tim!  
There are several technical inaccuracies in that trailer, but I won't pick on their warts is they don't pick on mine. ;-)

73 DE Dave AB5S

From wb3fau55 at neo.rr.com Thu Feb 14 18:12:57 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Thu, 14 Feb 2013 18:12:57 -0500  
Subject: [BoatAnchors] {Collins} The best way to clean a Collins board?  
In-Reply-To: <6.2.1.2.2.20130213192154.03e5ccc0@pop-server.nc.rr.com>  
Message-ID: <20130214231257.T71UY.146249.root@cdptpa-web03-z01>

heres what Art Collins would say- who wants that old junk? Buy a new one.  
---- john <johnmb at nc.rr.com> wrote:

> Slowly, and carefully in order to avoid damage, observe what condition your  
> radio is in and enjoy the process.  
>  
> If you're in a big hurry, perhaps it's the wrong hobby?  
>  
> :-)  
>  
> John K5M0  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From navy.radio at gmail.com Fri Feb 15 14:55:18 2013  
From: navy.radio at gmail.com (Nick England)  
Date: Fri, 15 Feb 2013 14:55:18 -0500  
Subject: [BoatAnchors] Capacitor hold-down brackets?  
Message-ID: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>

Hi gang - I need a couple of oil-filled capacitor retaining brackets for a transmitter I'm restoring - mouse pee corroded these so bad the studs broke. The brackets are 3" wide and 5" tall with two 1" 10-32 threaded mounting studs for connection to the chassis.  
The original type (Sangamo CP07SG4) is shown here -  
<http://www.navy-radio.com/xmtrs/frt17-2/cap-bracket-02.JPG>  
Any suggestions? - SurplusSales doesn't have any that would fit.

Alternatively, is there a source for 10-32 x 1" spade bolts that I could mount to the existing bracket?

Or, some other suggestions about how to repair these - the mounting studs were originally spot-welded to the brackets. Flatten a piece of 10-32 rod on an anvil to make my own studs and epoxy them on? or ???

thanks,  
Nick K4NYW

From anchor at ec.rr.com Fri Feb 15 15:05:23 2013  
From: anchor at ec.rr.com (Al Parker)  
Date: Fri, 15 Feb 2013 15:05:23 -0500  
Subject: [BoatAnchors] Capacitor hold-down brackets?  
In-Reply-To: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>  
References: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>  
Message-ID: <511E9503.6040707@ec.rr.com>

Hi Nick,

Spade bolts seem to be a rarity in the sources these days. They do list thumb screws, with flattened heads. You might use them, with a hole thru the head a la spade bolt, tho' the head won't easily fit flush to your hold-down. Maybe some grinding or filing would help that.

But your hammer formed spade bolt might be an easy solution.

Use a rivet to att. any of them to the hold-down.

We have a pretty good "old time" hardware store here that stocks lost of fasteners, I could take a look there for you.

my 2 cts worth,

73,

Al, W8UT

[www.boatanchors.org](http://www.boatanchors.org)

[www.hammarlund.info](http://www.hammarlund.info)

"There is nothing -- absolutely nothing -- half so much worth doing as simply messing about in boats"

Ratty, to Mole

On 2/15/2013 2:55 PM, Nick England wrote:

> Hi gang - I need a couple of oil-filled capacitor retaining brackets for a  
> transmitter I'm restoring - mouse pee corroded these so bad the studs  
> broke. The brackets are 3" wide and 5" tall with two 1" 10-32 threaded  
> mounting studs for connection to the chassis.

> The original type (Sangamo CP07SG4) is shown here -

> <http://www.navy-radio.com/xmtrs/frt17-2/cap-bracket-02.JPG>

> Any suggestions? - SurplusSales doesn't have any that would fit.

>

> Alternatively, is there a source for 10-32 x 1" spade bolts that I could  
> mount to the existing bracket?

>

> Or, some other suggestions about how to repair these - the mounting studs  
> were originally spot-welded to the brackets. Flatten a piece of 10-32 rod  
> on an anvil to make my own studs and epoxy them on? or ???

>

> thanks,

> Nick K4NYW

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

From gumbear at pacbell.net Fri Feb 15 15:09:20 2013

From: gumbear at pacbell.net (Arden Allen)

Date: Fri, 15 Feb 2013 12:09:20 -0800

Subject: [BoatAnchors] Capacitor hold-down brackets?

References: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>

Message-ID: <001b01ce0bb8\$5ae83b20\$4301a8c0@KB6NAX>

> .....Or, some other suggestions about how to repair these .....

Your best bet is to weld or braze new studs to the brackets. Obtain 10-32 thread stock or cut the heads of long screws. C clamp the stock to the brackets and weld or braze. Cut off extra lengths with Dremel cut-off wheel.

Arden Allen  
KB6NAX

If you pick up a starving dog and make him prosperous, he will not bite you. This is the principle difference between a dog and a man. -Mark Twain

From nbroline at austin.rr.com Fri Feb 15 16:25:13 2013

From: nbroline at austin.rr.com (Nick Broline)

Date: Fri, 15 Feb 2013 15:25:13 -0600

Subject: [BoatAnchors] LF Aircraft Ground-to-Air Coms

In-Reply-To: <mailman.0.1360951200.73923.boatanchors@theporch.com>

References: <mailman.0.1360951200.73923.boatanchors@theporch.com>

Message-ID: <23BED88374624DE2BFC678ADE7B0223D@newdualath>

Dave,

I believe the use of LF transmissions to early aircraft, particularly near the war, were closely tied to the use of LF NDB's. I remember as a kid in San Antonio, Texas, I heard NDB's carrying flight service station responses to aircraft, except this was in the early 50's and the aircraft transmitted on VHF to the FSS. I remember hearing aircraft tell the FSS on initial contact they were listening on the beacon. I also recall they ran weather products on the NDB that were interrupted by ground-to-air transmissions. (This was, of course, long before the advent of ATIS.) Their practice was also to provide the same voice services on VOR's. They may have also put voice info on the A-N Range stations, but I don't remember ever being glued for hours to the radio listening to the range stations! This appears to be the practice in the 50's based on my listening experience and faded memory. Someone please correct me if I'm all wet!

I have a benchmark in my hands...an Air Associates Inc. BR3T.....a dry battery transceiver using a 3105 kc transmitter and a 180-410 kc receiver.

It clearly has no ability to use the LF band in a navigation function, so all that is left is com. In fact, a mark on the receiver tuning dial shows the "tower frequency" (note there is only one shown) to be ~249 kc....or perhaps 249.5 kc?? This suggests the 249 ground-to-air frequency was paired with the 3105 kc air-to-ground channel as a convention at this point in time. The registration slip tucked between a couple of tubes showed the radio was FCC registered 3/27/43 to Globe Aircraft of Ft. Worth and the manufacturer was Air Associates of Ft. Worth. SN is 498. The registration is on safety paper (as in check paper). One can't be too careful about these things!

For anyone who cares, the receiver is a 4-tube superhet that is a 1.5V tube analog to the all-American Five AC-DC broadcast receiver. The transmitter features a 1T4 oscillator driving a 3Q4 final, modulated with a pair of paralleled 3Q4's through a real modulation transformer. Tx power indicator was a type 49 lamp paralleled by a resistor in series with the Tx antenna lead. Rx and Tx audio functions are on separate, but bolted together chassis. PA tuning was accessible without removing the case, so was probably done in place.

The only other recollection of aviation linked LF transmitters was the popular use of the 4D32 as the final in LF beacon applications. It showed itself in the Viking I and Collins 32V series. However, the 4D32 is probably way too new to be relevant in your pre-40's search.

One concrete thing here is the apparent pairing of 249 and 3105 kc. I suspect this may have been a hold-over from the pre-war aircraft com conventions. Registration date is mid-WW2, and I doubt there was much focus on civil aviation breakthroughs in that period because folks had other things on their minds. Please look at your old sectionals to see if there are any "standard" frequency assignments.

NDBs and beacons have always been a problem with antennas. The NDB, to be maximally useful, would be very near the airport. That implied the antenna should be low. I personally have never seen a LF beacon antenna that was not T fed in the middle with the vertical radiator. Of course, the more "C" they can put on the top of the radiator the less loading coil needed in the antenna tuner, so they probably did the best they could with capacitive loading while keeping it low.

73,

Nick Broline

W5FUA

512 327 7425

We shall not cease from exploration  
And at the end of exploring  
Will be to arrive where we started  
And know the place for the first time.

T.S. Eliot--"Little Gidding"

-----Original Message-----

From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of  
boatanchors-request at theporch.com

Sent: Friday, February 15, 2013 12:00 PM

To: boatanchors at theporch.com

Subject: BoatAnchors Digest, Vol 105, Issue 6

Send BoatAnchors mailing list submissions to  
boatanchors at theporch.com

To subscribe or unsubscribe via the World Wide Web, visit  
<https://minime.theporch.com/mailman/listinfo/boatanchors>  
or, via email, send a message with subject or body 'help' to  
boatanchors-request at theporch.com

You can reach the person managing the list at  
boatanchors-owner at theporch.com

When replying, please edit your Subject line so it is more specific  
than "Re: Contents of BoatAnchors digest..."

From navy.radio at gmail.com Fri Feb 15 17:32:31 2013

From: navy.radio at gmail.com (Nick England)

Date: Fri, 15 Feb 2013 17:32:31 -0500

Subject: [BoatAnchors] Capacitor hold-down brackets?

In-Reply-To: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>

References: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>

Message-ID: <CAB55hNd=g1qsXkjWd5obk2qqOKds3060YAz8sHQ\_vjecb-SQTg@mail.gmail.com>

Thanks for the replies, guys - several folks will check their junkboxes and I got several good suggestions on repair or making new spade bolts. As an experiment, I pounded flat the ends of a couple of brass screws and made something "not so beautiful" but probably useful. Then as I was coming out of the shop, I remember another p/s I had squirreled away and checked the caps on it - nope none fit but I did see the studs (spade bolts) were riveted on instead of welded - so I can drill out the rivets and have some nice spade bolts to use on the busted brackets if need be. For now, I've got the cap tie-wrapped in place and will see what the junk-box searches turn up.

Many thanks - what a helpful bunch of folks you are!

73 & Have Fun,

Nick K4NYW

On Fri, Feb 15, 2013 at 2:55 PM, Nick England <navy.radio at gmail.com> wrote:

> Hi gang - I need a couple of oil-filled capacitor retaining brackets for a  
> transmitter I'm restoring - mouse pee corroded these so bad the studs  
> broke. The brackets are 3" wide and 5" tall with two 1" 10-32 threaded  
> mounting studs for connection to the chassis.  
> The original type (Sangamo CP07SG4) is shown here -  
> <http://www.navy-radio.com/xmtrs/frt17-2/cap-bracket-02.JPG>  
> Any suggestions? - SurplusSales doesn't have any that would fit.  
>  
> Alternatively, is there a source for 10-32 x 1" spade bolts that I could  
> mount to the existing bracket?  
>  
> Or, some other suggestions about how to repair these - the mounting studs  
> were originally spot-welded to the brackets. Flatten a piece of 10-32 rod  
> on an anvil to make my own studs and epoxy them on? or ???  
>  
> thanks,  
> Nick K4NYW

From navy.radio at gmail.com Fri Feb 15 21:09:44 2013  
From: navy.radio at gmail.com (Nick England)  
Date: Fri, 15 Feb 2013 21:09:44 -0500  
Subject: [BoatAnchors] Capacitor hold-down brackets?  
In-Reply-To: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>  
References: <CAB55hNfKd8qmLP0u9EQ6A4Kc+oQbAwmGtP=y\_W4ouG4G1uHX2w@mail.gmail.com>  
Message-ID: <CAB55hNeRhAvdQJ0vSo6CA8yFFrN-5sv1bNcpbNjJRdKWU53R\_w@mail.gmail.com>

Problem solved - John WA4WDL found a pair of the original Sangamo  
brackets in his junk-box.

Thanks, gang - the boatanchors support network comes through again!  
Nick K4NYW

On Fri, Feb 15, 2013 at 2:55 PM, Nick England <navy.radio at gmail.com> wrote:  
> Hi gang - I need a couple of oil-filled capacitor retaining brackets for a  
> transmitter I'm restoring - mouse pee corroded these so bad the studs broke.  
> The brackets are 3" wide and 5" tall with two 1" 10-32 threaded mounting  
> studs for connection to the chassis.  
> The original type (Sangamo CP07SG4) is shown here -  
> <http://www.navy-radio.com/xmtrs/frt17-2/cap-bracket-02.JPG>  
> Any suggestions? - SurplusSales doesn't have any that would fit.  
>  
> Alternatively, is there a source for 10-32 x 1" spade bolts that I could  
> mount to the existing bracket?  
>  
> Or, some other suggestions about how to repair these - the mounting studs  
> were originally spot-welded to the brackets. Flatten a piece of 10-32 rod on

> an anvil to make my own studs and epoxy them on? or ???  
>  
> thanks,  
> Nick K4NYW

From wb0eq at yahoo.com Sun Feb 17 15:48:18 2013  
From: wb0eq at yahoo.com (John Sehring)  
Date: Sun, 17 Feb 2013 12:48:18 -0800 (PST)  
Subject: [BoatAnchors] To sell, or not to sell, that is the question  
Message-ID: <1361134098.24656.YahooMailNeo@web161001.mail.bf1.yahoo.com>

The very large Puyallup, WA hamfest is coming up soon.

I find it a terrific place to sell (& buy) stuff.

Want to make some decisions on what to clean out of the shack.?Kind of difficult sometimes for me.

E.g., have a Motorola (made by Boonton model 92) RF millivoltmeter model 1339A. ?  
Down to 1 mV, to 1 Ghz. ?SS circuit. ?Sadly it has no probe(s); they are almost  
unobtainable or very expensive. ?I have schematics of the probe--not so simple to  
build, esp. with the special Schottky diodes. ?It does power up. ?I can get a  
meter reading just by bringing my finger close to the input jack. ?And the zero  
control functions.

Companion piece is a HP 411A RF millivoltmeter, mixture of tubes & SS. ?Down to 10  
mV and 1 GHz. ?It has a probe (permanently affixed). ?Uses an opto/mechanical/  
electronic chopper. ?But meter's not doing so well. ?For ex. I can't get the thing  
to zero properly using the bias adjustment.

I haven't had the case off of either one, so trying to make a half-baked judgement  
call!

Whad'yall think?  
?

--John Sehring ?WB0EQ-VE6EQR ? nr Calgary, Alberta, Canada

From gumbear at pacbell.net Sun Feb 17 19:19:09 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sun, 17 Feb 2013 16:19:09 -0800  
Subject: [BoatAnchors] To sell, or not to sell, that is the question  
References: <1361134098.24656.YahooMailNeo@web161001.mail.bf1.yahoo.com>  
Message-ID: <001c01ce0d6e\$af25d960\$4301a8c0@KB6NAX>

> .....Whad'yall think?



Anything is possible in electronics but for me they'd best be put on ePuddle together as "for repair or parts."

Arden Allen  
KB6NAX

A lie can travel halfway around the world while  
the truth is putting on its shoes. -Mark Twain

From wb0eq at yahoo.com Sun Feb 17 20:57:48 2013  
From: wb0eq at yahoo.com (John Sehring)  
Date: Sun, 17 Feb 2013 17:57:48 -0800 (PST)  
Subject: [BoatAnchors] To sell, or not to sell,  
that is the question -- Follow up  
Message-ID: <1361152668.35850.YahooMailNeo@web161003.mail.bf1.yahoo.com>

I should have waited to write my previous note.

That's because the next item up for possible selling is an HP 8405A Vector Voltmeter.

It's got two probes & can measure amplitude, amplitude ratio & phase over a broad freq range of 1 MHz to 1 GHz, from 100 uV to 1 V. ?"2-channel tuned sampling RF millivoltmeter-phase meter which simultaneously measures & displays the voltage & phase of 2 signals.

Looks very complicated, all SS on separate circuit boards. I have the complete manual.

Lights come on, some meter deflection with my fingers holding probes.

I'm just not sure what I'd do with it.

-John Sehring ?WB0EQ-VE6EQR ? nr Calgary, Alberta, Canada

From arc5 at ix.netcom.com Tue Feb 19 08:10:30 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Tue, 19 Feb 2013 07:10:30 -0600  
Subject: [BoatAnchors] Programmable Oscillators for Boatanchor RX - Final  
Message-ID: <CF2DD5C5FE354A2782429C8195BF187A@CompaqSR5710F>

Programmable Oscillators for Boatanchor RX - Final

Well, the BC-942 (R-28/ARC-5) VHF receiver

is buttoned-up and doing well.

Listened to some "ultra-light" guys enjoying an early-morning flight and gabbing on 122.8 MC Unicom.

Now, I don't "calculate" project designs- I ain't that smart.

I bludgeon them into submission.

You "smart people" can tell me the "whys."

So here are some "shade-tree" conclusions.

[http://arc5 at home.netcom.com/www/ItWorks2.jpg](http://arc5.at.home.netcom.com/www/ItWorks2.jpg)

I used two configurations- "L0" oscillators on the same freq as an original crystal would have used and "HI" oscillators, set at the \*4 freq of the first multiplier in the L0 chain. Built them on little perf-boards mounted to the bases from defunct crystals.

Made a 6-volt power buss from one of those little DC-DC "buck" converters:

<http://www.ebay.com/itm/261053380853>

Tucked it under the Audio section and ran the buss line through the channel relay mount and one of the holes in the center of the crystal sockets.

Because the little oscillators provide a constant DC load, I could have used a simple voltage-dropping

resistor. 390 Ohms from the 24-volt fil line worked well. But we're talking about a big resistor generating a lot of heat and this rig gets hot enough.

One of the channels ( 118.55 MC ) does have a light "converter whistle" in the background, but I can live with that. Just don't mount the thing right under the IF strip.

The L0 oscillators [  $F_{xtal} MC = (F_{op} - 6.9 MC) / 24$  ]

need a little 4:1 voltage-boosting UNUN

to deliver enough drive. I got mine all pre-made and ready to go from Tanner's surplus house.

He's got about a bizillion for, I think, 25 cents each.

I also tried a 9:1, but that didn't do any better than 4:1.

The two capacitors are there for DC blocking.

Values not critical, but .01 uFd is "too much."

Loads the things down a little.

I settled on .004 uFd because I had a bunch of small ones on hand.

Yes, I know the things are speced to drive 15 pFd load.

I did try a simple series cap feed so the chip would see 15 pFd, but this didn't develop enough drive at the multiplier grid to work.

I don't know "why;" that's what I have you  
Smart People for ;-)  
Compared the LO Oscillator to a crystal and found  
little difference in performance between them.

The HI Oscillators [  $F_{xtal} MC = (F_{op} - 6.9 MC) / 6$  ]  
did not require the UNUN. 2 volts of drive appear  
to be enough when using this freq.

The HI oscillators do indeed introduce jitter "phase noise"  
in the receiver, raising the noise floor noticeably.  
The LO oscillators did not do so. I don't know "why not."  
But this concern with the HI oscillators is offset  
by these considerations:

First- What is the goal?  
Attempting to do "weak signal" work with an  
R-28 AN/ARC-5 VHF receiver would be foolishness.  
The "goal" is to get this WWII rig operable and  
demonstratable, and (if lucky), to make a few  
very local AM contacts. Thus, a higher-than-spec  
noise floor isn't an issue.

Second:  
Cost of a single new crystal: about \$45.  
Cost of a single Prog Osc. substitute: about \$6.  
Case closed ;-)

Some notes on BC-942 / R-28 ARC-5 receiver:  
Even carefully following the manual alignment procedure  
and with decent test equipment, getting the front-end to  
"track" and provide good sensitivity across the entire range  
is difficult at best. I spent as much time as I could afford on  
it and finally accepted that the sensitivity was going to fall-off  
considerably above 140 MC. I'm not working DX with it  
so this was acceptable.  
Sensitivity in the Aircraft band is only a couple of dB below  
that of a modern scanner. Not bad.

Wide-Band FM in the broadcast band sounds pretty good  
if you're lucky enough to have a crystal at just the right point  
on the slope. But not so with Narrow-Band FM.  
If you want to try "slope detecting" a 2-meter repeater,  
you will need a very strong signal and you've got to get  
30-50 KC off center to demodulate it at all.  
You cannot demodulate even a smidge of an on-freq FM signal.

Many different crystal "multiplication factors:" x12, x18 etc.

will work with the LO chain. Try what ya got.

Next - Will it work with the BC-950 ( T-23 ARC-5 )  
VHF transmitter?

73 DE Dave AB5S

From arc5 at ix.netcom.com Tue Feb 19 08:23:45 2013  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Tue, 19 Feb 2013 07:23:45 -0600  
Subject: [BoatAnchors] [ARC5] Programmable Oscillators for Boatanchor RX  
- Final  
In-Reply-To: <CF2DD5C5FE354A2782429C8195BF187A@CompaqSR5710F>  
References: <CF2DD5C5FE354A2782429C8195BF187A@CompaqSR5710F>  
Message-ID: <FC288AAE9C1C435894A65790C148EC47@CompaqSR5710F>

Corrected URL for the illustration:

<http://home.netcom.com/~arc5/ItWorks2.jpg>

From W4UOC at aol.com Tue Feb 19 10:09:45 2013  
From: W4UOC at aol.com (W4UOC at aol.com)  
Date: Tue, 19 Feb 2013 10:09:45 -0500 (EST)  
Subject: [BoatAnchors] Vintage Radio Estate Sale - Metro Atlanta Area  
Message-ID: <45e04.2590e8de.3e54efb9@aol.com>

I am helping to dispose of some amateur radio equipment for an estate located in Atlanta, GA.  
If you have an interest in any of this equipment let me know and I will provide you with more details. I have not had time to check any of it out and can send some pictures of it. I would recommend you go to [\\_www.rigpix.com\\_](http://www.rigpix.com) (<http://www.rigpix.com/>) to get some detailed information on each.

I will not have it picked up or checked out prior to upcoming Dalton Hamfest and will not be bring any of it to that hamfest. Some of the smaller items can be shipped but I would prefer pickup either at my home or at the home of the widow who lives in the Buckhead area of Atlanta.

Tom Koch - W4UOC  
404-314-6109

[\\_w4uoc at aol.com\\_ \(mailto:w4uoc at aol.com\)](mailto:w4uoc at aol.com)

Mfg  
Type  
Model  
Listing Price  
Dentron  
Antenna Tuner  
80-10 AT

\$90.00

Drake  
Antenna Tuner  
MN-2000

\$214.00  
Drake  
Receiver  
R4-C

\$344.00  
Drake  
Transmitter  
T4X  
\$166.00  
Drake  
P/S Speaker  
MS-4

\$70.00  
Drake  
Transmitter  
TR-3  
\$201.00

Hallicrafters  
Receiver  
S-40B

\$90.00  
Hallicrafters  
Receiver  
S-40A

\$100.00  
Hallicrafters  
Receiver  
S-76

\$190.00  
Hallicrafters  
Receiver  
SX-100

\$270.00  
Hallicrafters  
Receiver  
SX-100

\$270.00  
Hallicrafters  
Receiver  
Sky Champion

\$120.00  
Hallicrafters  
Receiver  
SX-115

\$1,225.00  
Hallicrafters  
Transmitter

HT-32

\$250.00

Hallicrafters  
Speaker Large

\$50.00

Hallicrafters  
Speaker Small

\$30.00

Heathkit  
Station Console  
SB-634

\$135.00

Heathkit  
Monitor Scope  
SB-614

\$109.00

Heathkit  
Transceiver  
SB-104

\$265.00

Heathkit  
Power Supply  
SB-604

\$4.00

Heathkit  
Monitor Scope

SB-610

\$128.00  
Heathkit  
Receiver  
SB-303

\$200.00  
Healthkit  
Receiver  
HR-1689

\$94.00  
Heathkit  
Station Console  
SB-630

\$111.00  
Heathkit  
VHF Transceiver  
HW-202

\$90.00  
Heathkit  
SWR Meter  
HM-102

\$40.00  
Heathkit  
SWR Meter  
2140 A

\$57.00  
Heathkit  
SWR Meter  
HM-15

\$26.00  
Heathkit  
SWR Meter



HM-11

\$16.00

Swan  
Transceiver  
500

\$300.00

Swan  
Transceiver  
200

\$419.00

Swan  
Power Supply  
PS/20

\$50.00

From W4UOC at aol.com Tue Feb 19 10:00:32 2013  
From: W4UOC at aol.com (W4UOC at aol.com)  
Date: Tue, 19 Feb 2013 10:00:32 -0500 (EST)  
Subject: [BoatAnchors] Amateur Radio Estate Sale - Metro Atlanta Area  
Message-ID: <458da.7b14dabd.3e54ed90@aol.com>

I am helping to dispose of some amateur radio equipment for an estate located in Atlanta, GA.  
If you have an interest in any of this equipment let me know and I will provide you with more details. I have not had time to check any of it out and can send some pictures of it. I would recommend you go to [www.rigpix.com](http://www.rigpix.com) (<http://www.rigpix.com>) to get some detailed information on each.

I will not have it picked up or checked out prior to upcoming Dalton Hamfest and will not be bringing any of it to that hamfest. Some of the smaller items can be shipped

but I would prefer  
pickup either at my home or at the home of the widow who lives in the  
Buckhead area of Atlanta.

Tom Koch - W4UOC  
404-314-6109  
\_w4uoc at aol.com\_ (mailto:w4uoc at aol.com)

Mfg  
Type  
Model  
Listing Price  
Dentron  
Antenna Tuner  
80-10 AT

\$90.00

Drake  
Antenna Tuner  
MN-2000

\$214.00  
Drake  
Receiver  
R4-C

\$344.00  
Drake  
Transmitter  
T4X  
\$166.00  
Drake  
P/S Speaker  
MS-4

\$70.00

Drake  
Transmitter  
TR-3  
\$201.00

Hallicrafters  
Receiver  
S-40B

\$90.00  
Hallicrafters  
Receiver  
S-40A

\$100.00  
Hallicrafters  
Receiver  
S-76

\$190.00  
Hallicrafters  
Receiver  
SX-100

\$270.00  
Hallicrafters  
Receiver  
SX-100

\$270.00  
Hallicrafters  
Receiver  
Sky Champion

\$120.00  
Hallicrafters  
Receiver

SX-115

\$1,225.00

Hallicrafters  
Transmitter  
HT-32

\$250.00

Hallicrafters  
Speaker Large

\$50.00

Hallicrafters  
Speaker Small

\$30.00

Heathkit  
Station Console  
SB-634

\$135.00

Heathkit  
Monitor Scope  
SB-614

\$109.00

Heathkit  
Transceiver  
SB-104

\$265.00

Heathkit  
Power Supply

SB-604

\$4.00

Heathkit  
Monitor Scope  
SB-610

\$128.00

Heathkit  
Receiver  
SB-303

\$200.00

Healthkit  
Receiver  
HR-1689

\$94.00

Heathkit  
Station Console  
SB-630

\$111.00

Heathkit  
VHF Transceiver  
HW-202

\$90.00

Heathkit  
SWR Meter  
HM-102

\$40.00

Heathkit  
SWR Meter  
2140 A

\$57.00

Heathkit  
SWR Meter

HM-15

\$26.00  
Heathkit  
SWR Meter  
HM-11

\$16.00

Swan  
Transceiver  
500

\$300.00  
Swan  
Transceiver  
200

\$419.00  
Swan  
Power Supply  
PS/20

\$50.00

From ark at ar88.net Tue Feb 19 11:23:29 2013  
From: ark at ar88.net (Al Klase)  
Date: Tue, 19 Feb 2013 11:23:29 -0500  
Subject: [BoatAnchors] [ARC5] Programmable Oscillators for Boatanchor RX  
- Final  
In-Reply-To: <FC288AAE9C1C435894A65790C148EC47@CompaqSR5710F>  
References: <CF2DD5C5FE354A2782429C8195BF187A@CompaqSR5710F>  
<FC288AAE9C1C435894A65790C148EC47@CompaqSR5710F>  
Message-ID: <5123A701.2060406@ar88.net>

Dave,

Which programmable oscillators are you using. I came in late.

A1

On 2/19/2013 8:23 AM, David Stinson wrote:

> Corrected URL for the illustration:

>

> <http://home.netcom.com/~arc5/ItWorks2.jpg>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

>

> -----

> No virus found in this message.

> Checked by AVG - [www.avg.com](http://www.avg.com)

> Version: 10.0.1430 / Virus Database: 2639/5614 - Release Date: 02/18/13

--

A1 Klase - N3FRQ

Jersey City, NJ

<http://www.skywaves.ar88.net/>

From wb0eq at yahoo.com Tue Feb 19 11:26:34 2013

From: wb0eq at yahoo.com (John Sehring)

Date: Tue, 19 Feb 2013 08:26:34 -0800 (PST)

Subject: [BoatAnchors] To sell, or not to sell, that is the question

Message-ID: <1361291194.18017.YahooMailNeo@web161005.mail.bf1.yahoo.com>

Thanks to all who responded to my query on usefulness of HP 411A RF millivoltmeter, 2@ HP 412A high-Z DC VTVM, and HP 8405 vector voltmeter. ? Excellent advice!

The first two items use choppers for DC stabilization. ?Very cute with sync motor, spinning disk, 4 small incand. bulbs & lucite light pipes! ?Gets rid of dreaded DC drift by taking input DC, chopping & amplifying now AC, then synchronously (uses same chopper for both) unchopping (demodulating) to DC for output. ?Works! ? Unfixable, but being HP, maybe will run forever. ?Motors are Hayden sync. multipole motors, silent running, not ever any vibs.

Clever circuit. ?Never ran across this in instrumentation before. ?Reliable? ?You have any experiences?

Based on your inputs, I'm keeping the 411A and others will go to Puyallup WA hamfest.

Thanks again.

?

--John Sehring ?WB0EQ-VE6EQR ? nr Calgary, Alberta, Canada

From hankvc at lostwells.net Fri Feb 22 00:10:20 2013

From: hankvc at lostwells.net (HankVC)

Date: Thu, 21 Feb 2013 22:10:20 -0700 (MST)

Subject: [BoatAnchors] To sell, or not to sell, that is the question

In-Reply-To: <1361291194.18017.YahooMailNeo@web161005.mail.bf1.yahoo.com>

Message-ID: <201302220510.r1M5AKog027164@joanne.lostwells.net>

The esteemed John Sehring has said:

>

> Thanks to all who responded to my query on usefulness of HP 411A RF millivoltmeter, 2@ HP 412A high-Z DC VTVM, and HP 8405 vector voltmeter. ? Excellent advice!

>

> Based on your inputs, I'm keeping the 411A and others will go to Puyallup WA hamfest.

>

I didn't answer your first post as I did not see HP 412A's listed. Also did not see responses posted to the list.

The 412A voltmeters are worth fixing and keeping. The chopper bulbs are #12's, pin plug-in type, and they tend to lose good contact and go out. Another problem is with 6U8 tubes---the meter tube needs to have low leakage so that you can zero things out with the bias adjustment. There's a click on the range switch for setting bias, documented only in the manual.

If you can't get infinity on the highest ohms range, the problem is leakage inside the probe. I've been able to clean them up and get infinity, but they have to be absolutely clean and absolutely dry.

These units rely completely on precision passive components for accuracy, and don't seem to drive out of calibration with age. I use one both on the bench and to cross-check calibration of my other meters.

Don't know about the 411A, but if its chopper is similar to the 412A, about the only thing that goes wrong are the light bulb contacts.

Hank

From spr at earthlink.net Fri Feb 22 03:06:43 2013



From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 22 Feb 2013 00:06:43 -0800  
Subject: [BoatAnchors] To sell, or not to sell, that is the question  
In-Reply-To: <201302220510.r1M5AKog027164@joanne.lostwells.net>  
References: <201302220510.r1M5AKog027164@joanne.lostwells.net>  
Message-ID: <51272713.2040403@earthlink.net>

Hi John,

When I recommended against the 412A's due to the absence of the AC probe, I was thinking of an RF only voltmeter, useless without the probe. Hank having reminded me what a 412A is, I'd like to revise my advice.

I'd \*also\* keep both the 412A meters--one for spares--and not expect to use them on AC. They work quite nicely on DC and ohms, and the 100 Meg input impedance is handy for measuring AVC voltage. They are very nice meters.

When doing my two 412s, I found that in both cases a 25 Meg precision resistor had aged up. You can still buy such things, for about \$5 as I recall) from Mouser or Digi-Key, and that brought the whole meter right into calibration. The only drifty thing about them is the FS ohms ranges; they have to be on for 10 minutes or so for the power supply that runs the ohms ranges to settle.

Regards,

Scott

On 2/21/13 9:10 PM, HankVC wrote:

> The esteemed John Sehring has said:

>>

>> Thanks to all who responded to my query on usefulness of HP 411A RF millivoltmeter, 2@ HP 412A high-Z DC VTVM, and HP 8405 vector voltmeter. Excellent advice!

>>

>> Based on your inputs, I'm keeping the 411A and others will go to Puyallup WA hamfest.

>>

> I didn't answer your first post as I did not see HP 412A's listed.

> Also did not see responses posted to the list.

>

> The 412A voltmeters are worth fixing and keeping. The chopper bulbs  
> are #12's, pin plug-in type, and they tend to lose good contact and go  
> out. Another problem is with 6U8 tubes---the meter tube needs to have  
> low leakage so that you can zero things out with the bias adjustment.  
> There's a click on the range switch for setting bias, documented only  
> in the manual.

>  
> If you can't get infinity on the highest ohms range, the problem is  
> leakage inside the probe. I've been able to clean them up and get  
> infinity, but they have to be absolutely clean and absolutely dry.  
>  
> These units rely completely on precision passive components for  
> accuracy, and don't seem to drive out of calibration with age.  
> I use one both on the bench and to cross-check calibration of my other  
> meters.  
>  
> Don't know about the 411A, but if its chopper is similar to the 412A,  
> about the only thing that goes wrong are the light bulb contacts.  
>  
> Hank  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From gumbear at pacbell.net Fri Feb 22 15:01:34 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Fri, 22 Feb 2013 12:01:34 -0800  
Subject: [BoatAnchors] To sell, or not to sell, that is the question  
References: <201302220510.r1M5AKog027164@joanne.lostwells.net>  
Message-ID: <001601ce1137\$709a7fd0\$4301a8c0@KB6NAX>

> .....These units rely completely on precision passive components for  
accuracy, and don't seem to drive out of calibration with age. ...

Ditto on that, Hank. I've had my 412A since rescuing it from C&H Surplus in  
Pasadena about ' 71. Never had to recalibrate it since then, it has always  
checked right on with my accurate digi meters.

A note of caution for the fixer-restorer: The range switch plastic wafers  
are made of polysulfone which is susceptible to damage from solvents. Use  
only the mildest contact lube, sparingly, such as Caig FaderLube.

Arden Allen  
KB6NAX

Properly trained a man can be  
dog's best friend. -Corey Ford

From rbaldwin14 at nc.rr.com Fri Feb 22 15:30:40 2013

From: rbaldwin14 at nc.rr.com (Richard Baldwin)  
Date: Fri, 22 Feb 2013 15:30:40 -0500  
Subject: [BoatAnchors] R 390/A cabinets  
Message-ID: <03e101ce113b\$7b4364c0\$71ca2e40\$@rr.com>

It appears that there are 43 brand new in boxes R 390/A cabinets available. I don't know the price yet, but \$500 ish was mentioned on my last communication. These are all gray with the shock mounts and sled feet. Let me know ASAP if you want one or more and I will try to get a final price before committing anything!

Rich Baldwin

KD6VK

From rbaldwin14 at nc.rr.com Fri Feb 22 15:52:35 2013  
From: rbaldwin14 at nc.rr.com (Richard Baldwin)  
Date: Fri, 22 Feb 2013 15:52:35 -0500  
Subject: [BoatAnchors] R 390/A Cabinets  
Message-ID: <040401ce113e\$8ac5dab0\$a0519010\$@rr.com>

The price is not set in concrete, but it is looking like \$465 shipped to your door.

Rich Baldwin

KD6VK

From rbaldwin14 at nc.rr.com Sat Feb 23 08:12:21 2013  
From: rbaldwin14 at nc.rr.com (Richard Baldwin)  
Date: Sat, 23 Feb 2013 08:12:21 -0500  
Subject: [BoatAnchors] R 390?a Cabinets. Brand New  
Message-ID: <00f201ce11c7\$6a32eed0\$3e98cc70\$@rr.com>

Hey guys, please respond either way, positive or negative on this issue so I can pass our thoughts along to the supplier. There are 43 of these available and the guy who is procuring them does not want to get stuck with a bunch of cabinets that do not have a home. You don't have to commit to buying one, just tell me if you might like to have one at this price. They look awfully nice holding that R 390 or R 390A that you own and will surely

NEVER be available again in this condition. I am not sure, they might also hold the SP-600. Al, can you confirm that for me?

You guys all know that Shelby Hamfest is back in Shelby this year, right?

I'll see many of you at Charlotte on the 8th and 9th and then again at RARSFEST on the 30th of March. Hamfest season is upon us.

Thanks

Rich Baldwin

KD6VK

From mike at oldaudio.net Sat Feb 23 11:22:49 2013  
From: mike at oldaudio.net (Mike Durff)  
Date: Sat, 23 Feb 2013 08:22:49 -0800 (PST)  
Subject: [BoatAnchors] selling equipment: an OPINION  
Message-ID: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>

Hello all:

I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies, & connecting cables should be listed as one unit. I believe it is a disservice to break up these items as they become more scarce.

Case in point; I was recently bidding on a mil surplus RCVR to go with a transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.

I think the seller could have gleaned more money had the unit & PS been listed together.

Yes, I know this is a free country, etc... flames not necessary.

(rant off)

TNX, MD

From john.shriver at gmail.com Sat Feb 23 11:58:19 2013

From: john.shriver at gmail.com (John Shriver)  
Date: Sat, 23 Feb 2013 11:58:19 -0500  
Subject: [BoatAnchors] selling equipment: an OPINION  
In-Reply-To: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>  
References: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>  
Message-ID: <A7BEAFA1-6BE7-4A7D-84AD-EF2D9A1998C9@gmail.com>

The canonical eBay wisdom is to split it up. For instance, when selling a camera, sell the camera, lens, lens hood, and case separately.

Sometimes this is a crying shame, since you're splitting up stuff that has been together since day one.

But there are collectible Leica lens hoods that are worth MORE than the lens they go on.

On Feb 23, 2013, at 11:22 AM, Mike Durff <mike at oldaudio.net> wrote:

> Hello all:  
> I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies, & connecting cables should be listed as one unit. I believe it is a disservice to break up these items as they become more scarce.  
> Case in point; I was recently bidding on a mil surplus RCVR to go with a transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.  
> I think the seller could have gleaned more money had the unit & PS been listed together.  
> Yes, I know this is a free country, etc... flames not necessary.  
> (rant off)  
> TNX, MD  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From w5sum at comcast.net Sat Feb 23 11:53:23 2013  
From: w5sum at comcast.net (Ronnie Hull)  
Date: Sat, 23 Feb 2013 10:53:23 -0600  
Subject: [BoatAnchors] selling equipment: an OPINION  
In-Reply-To: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>  
References: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>  
Message-ID: <4666DB28-A6E2-401B-8CC9-B658638F65D3@comcast.net>

I agree and disagree! I have gotten burned just like you! Really pounds sand in your butt, BUT..,

These folks are selling to make money, and anyone who has sold on auction sites knows that you will ALWAYS make more money when you split your items up!

Capitalism at its best!

Two years ago I broke up a heathkit station when I sold it and easily made 30% more than I would have if I had sold the group!

Yesterday I got a BC348 off eBay, advertised as fully restored, works perfect, etc etc

It's a friggin hacked up mess,,, but I woke up on the green side of the sod this morning and no one is throwing grenades at me so it's a wonderful day!

God bless and 73's

W5SUM - Ronnie

Sent from Ronnie's iPhone

On Feb 23, 2013, at 10:22 AM, Mike Durff <mike at oldaudio.net> wrote:

> Hello all:

> I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies,& connecting cables should be listed as one unit. I believe it is a dis-service to break up these items as they become more scarce.

> Case in point; I was recently bidding on a mil surplus RCVR to go with a transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.

> I think the seller could have gleaned more money had the unit & PS been listed together.

> Yes, I know this is a free country, etc... flames not necessary.

> (rant off)

> TNX, MD

>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From rbsingl at ilstu.edu Sat Feb 23 12:13:47 2013

From: rbsingl at ilstu.edu (Singley, Rodger)

Date: Sat, 23 Feb 2013 17:13:47 +0000

Subject: [BoatAnchors] selling equipment: an OPINION

In-Reply-To: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>

References: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>

Message-ID: <0DEBF1C8D8437248BE53CD4213B89BD322EC800D@ISUEMBX01.ad.ilstu.edu>

Mike,

I agree it is an annoying practice but most of the time it will net the seller more to break up the pieces. I think the better for the seller exception would be a rare piece in very good to excellent condition that truly has every major and minor accessory as part of the package deal (including the original box if it is a civilian piece of gear). For some buyers a single piece is all they want and I have been in that situation before many times including buying the matching power supply for my Gonset G76, a single cable for my TCS setup, an external VFO to complete a Tempo 2020 station, etc.

Even more disturbing but equally profitable is taking apart a working piece of popular gear to sell the parts. This piecemeal approach, especially if there are options like IF filters and noise blankers involved, can increase the parts price far beyond that of the complete piece of gear. Of course there is nothing new to this and I think it was the late 60s or early 70s when congress held hearings about automotive replacement parts pricing and found the customer retail price of the individual parts (just parts, no labor) for a Lincoln Continental totaled somewhere around 4 times the complete selling price of the assembled new car and it was even worse for lower priced; the Pinto had somewhere around a 6X multiplier.

I have purchased some gear on ebay that I probably would never find anywhere else. Some of the neatest W. Coast gear I own came after I purchased a receiver on ebay and the seller and I became acquainted leading to the private sale of some very nice Patterson, Breting, Sargent, and home brew equipment. I mostly buy parts on ebay now but once in awhile something unusual and reasonably priced catches my attention.

I have been an ebay member for a long time but only as a buyer and when I sell gear it is done either locally at hamfests or via a regional vintage net. I wouldn't care to deal with the hassle of describing, selling, and shipping gear to a stranger.

Rodger WQ9E

Dr. Rodger B. Singley  
Professor of Marketing

-----Original Message-----

From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Mike Durff

Sent: Saturday, February 23, 2013 10:23 AM

To: BoatAnchors at theporch.com

Subject: [BoatAnchors] selling equipment: an OPINION

Hello all:

I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies,& connecting cables should be listed as one unit. I believe it is a dis-service to break up these items as they become more scarce.

Case in point; I was recently bidding on a mil surplus RCVR to go with a transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.

I think the seller could have gleaned more money had the unit & PS been listed together.

Yes, I know this is a free country, etc... flames not necessary.

(rant off)

TNX, MD

-----  
BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From k4oah at mindspring.com Sat Feb 23 13:13:04 2013

From: k4oah at mindspring.com (Garey Barrell)

Date: Sat, 23 Feb 2013 13:13:04 -0500

Subject: [BoatAnchors] selling equipment: an OPINION

In-Reply-To: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>

References: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>

Message-ID: <512906B0.10000@mindspring.com>

Mike -

Just be glad they haven't discovered that thetubes just unplug!!!

73, Garey - K40AH

Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line

and TR-4/C Service Supplement CDs

<[www.k4oah.com](http://www.k4oah.com)>

Mike Durff wrote:

> Hello all:

> I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies,& connecting cables should be listed as one unit. I believe it is a dis-service to break up these items as they become more scarce.

> Case in point; I was recently bidding on a mil surplus RCVR to go with a



transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.

> I think the seller could have gleaned more money had the unit & PS been listed together.

> Yes, I know this is a free country, etc... flames not necessary.

> (rant off)

> TNX, MD

>

From wb3fau55 at neo.rr.com Sat Feb 23 15:00:57 2013

From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)

Date: Sat, 23 Feb 2013 15:00:57 -0500

Subject: [BoatAnchors] selling equipment: an OPINION

In-Reply-To: <0DEBF1C8D8437248BE53CD4213B89BD322EC800D@ISUEMBX01.ad.ilstu.edu>

Message-ID: <20130223200057.4TFJD.13697.root@cdptpa-web21-z02>

best place to get a deal is at a hamfest...

----- "Singley wrote:

> Mike,

>

> I agree it is an annoying practice but most of the time it will net the seller more to break up the pieces. I think the better for the seller exception would be a rare piece in very good to excellent condition that truly has every major and minor accessory as part of the package deal (including the original box if it is a civilian piece of gear). For some buyers a single piece is all they want and I have been in that situation before many times including buying the matching power supply for my Gonset G76, a single cable for my TCS setup, an external VFO to complete a Tempo 2020 station, etc.

>

> Even more disturbing but equally profitable is taking apart a working piece of popular gear to sell the parts. This piecemeal approach, especially if there are options like IF filters and noise blankers involved, can increase the parts price far beyond that of the complete piece of gear. Of course there is nothing new to this and I think it was the late 60s or early 70s when congress held hearings about automotive replacement parts pricing and found the customer retail price of the individual parts (just parts, no labor) for a Lincoln Continental totaled somewhere around 4 times the complete selling price of the assembled new car and it was even worse for lower priced; the Pinto had somewhere around a 6X multiplier.

>

> I have purchased some gear on ebay that I probably would never find anywhere else. Some of the neatest W. Coast gear I own came after I purchased a receiver on ebay and the seller and I became acquainted leading to the private sale of some very nice Patterson, Breting, Sargent, and home brew equipment. I mostly buy parts on ebay now but once in awhile something unusual and reasonably priced

catches my attention.

>

> I have been an ebay member for a long time but only as a buyer and when I sell gear it is done either locally at hamfests or via a regional vintage net. I wouldn't care to deal with the hassle of describing, selling, and shipping gear to a stranger.

>

> Rodger WQ9E

>

> Dr. Rodger B. Singley

> Professor of Marketing

>

>

>

> -----Original Message-----

> From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of Mike Durff

> Sent: Saturday, February 23, 2013 10:23 AM

> To: BoatAnchors at theporch.com

> Subject: [BoatAnchors] selling equipment: an OPINION

>

> Hello all:

> I have an opinion (rant) that I would like to express here. When listing equipment for sale on auction sites it is my opinion that the equipment, power supplies, & connecting cables should be listed as one unit. I believe it is a disservice to break up these items as they become more scarce.

> Case in point; I was recently bidding on a mil surplus RCVR to go with a transmitter I have owned for 50 years. I was also bidding on the power supply the seller had listed separately. You can see where this is going...I won the receiver, & the other bidder won the power supply.

> I think the seller could have gleaned more money had the unit & PS been listed together.

> Yes, I know this is a free country, etc... flames not necessary.

> (rant off)

> TNX, MD

>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From gumbear at pacbell.net Sat Feb 23 15:09:46 2013

From: gumbear at pacbell.net (Arden Allen)  
Date: Sat, 23 Feb 2013 12:09:46 -0800  
Subject: [BoatAnchors] R 390?a Cabinets. Brand New  
References: <00f201ce11c7\$6a32eed0\$3e98cc70\$@rr.com>  
Message-ID: <002d01ce1205\$93caf010\$4301a8c0@KB6NAX>

> .....Hey guys, please respond either way, positive or negative on this issue so I

can pass our thoughts along to the supplier. There are 43 of these available and the guy who is procuring them does not want to get stuck with a bunch of cabinets that do not have a home. ....

Rich, I have a 390 and a 390A that would love to be dressed in original cabinets but the price of each of those cabinets may be today's market but not my budget. Are these cabs original government procurement or recent fab for 390 restorations?

Arden Allen  
KB6NAX

From gumbear at pacbell.net Sat Feb 23 15:37:14 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sat, 23 Feb 2013 12:37:14 -0800  
Subject: [BoatAnchors] selling equipment: an OPINION  
References: <1361636569.11330.YahooMailClassic@web5718.biz.mail.ne1.yahoo.com>  
Message-ID: <002e01ce1205\$945c0c80\$4301a8c0@KB6NAX>

> .....I won the receiver, & the other bidder won the power supply. ....

Most of the sellers on eSwamp are junque purveyors and not very sensitive to the needs or wants of buyers. I once tried to argue a seller into selling me a whole piece of equipment instead of parting it out - to no avail. Another was happy to just move a piece of gear down the road having thought it would be more attractive in pieces. The lesson is, NEGOTIATE. E-mail the seller and plead your case. Induce a sympathetic response if possible along with a proposition like, "how much do you want to get for both pieces and add to your listings "make offer" and sell to me" (if the seller wants to pull the listing and sell to you direct without going through eBay that will be his problem, not yours). Of course some sellers are just boneheads and can't figure their way out of a wet paper bag. Some are corporate mentality types that have to ask permission to go to the bathroom. In most cases negotiation has worked for me. The cardinal rule is, "money talks, BS walks." Fairness is in the eyes of the buyer in most cases but don't let that ruin your day.

Arden Allen  
KB6NAX

If you get to thinking you're a person of some influence, try ordering somebody

else's dog around. -Will Rogers

From wb3fau55 at neo.rr.com Sun Feb 24 06:23:37 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Sun, 24 Feb 2013 6:23:37 -0500  
Subject: [BoatAnchors] R 390?a Cabinets. Brand New  
In-Reply-To: <002d01ce1205\$93caf010\$4301a8c0@KB6NAX>  
Message-ID: <20130224112337.ADJN0.15768.root@cdptpa-web21-z02>

any chance of getting some pictures?

---- Arden Allen <gumbear at pacbell.net> wrote:

> > .....Hey guys, please respond either way, positive or negative on this issue  
so I

> can pass our thoughts along to the supplier. There are 43 of these  
> available and the guy who is procuring them does not want to get stuck with  
> a bunch of cabinets that do not have a home. ....

>

> Rich, I have a 390 and a 390A that would love to be dressed in original cabinets  
but the price of each of those cabinets may be today's market but not my budget.  
Are these cabs original government procurement or recent fab for 390 restorations?

>

> Arden Allen

> KB6NAX

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From wb3fau55 at neo.rr.com Sun Feb 24 10:33:02 2013  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Sun, 24 Feb 2013 10:33:02 -0500  
Subject: [BoatAnchors] selling equipment: an OPINION  
In-Reply-To: <002e01ce1205\$945c0c80\$4301a8c0@KB6NAX>  
Message-ID: <20130224153302.AWW33.16313.root@cdptpa-web21-z02>

All well said Arden, I have been buying/selling BAs for many years. As you all  
well know,  
places like [Eprey] have ruined a good amount of the fun/fair pricing of our  
favorite  
BA stuff. Most sellers now-a-days, are not real concerned about your needs,  
they just  
want your cash. What you could buy, 20 years ago for \$25, now is netting \$100s.  
It has  
more to do with current popularity of a particular item. Deals can be made  
at smaller  
hamfests, you have to be a good hunter...73 Russ.

---- Arden Allen <gumbear at pacbell.net> wrote:

> > .....I won the receiver, & the other bidder won the power supply. ....  
>

> Most of the sellers on eSwamp are junque purveyors and not very sensitive to the needs or wants of buyers. I once tried to argue a seller into selling me a whole piece of equipment instead of parting it out - to no avail. Another was happy to just move a piece of gear down the road having thought it would be more attractive in pieces. The lesson is, NEGOTIATE. E-mail the seller and plead your case. Induce a sympathetic response if possible along with a proposition like, "how much do you want to get for both pieces and add to your listings "make offer" and sell to me" (if the seller wants to pull the listing and sell to you direct without going through eBay that will be his problem, not yours). Of course some sellers are just boneheads and can't figure their way out of a wet paper bag. Some are corporate mentality types that have to ask permission to go to the bathroom. In most cases negotiation has worked for me. The cardinal rule is, "money talks, BS walks." Fairne

ss

> is in the eyes of the buyer in most cases but don't let that ruin your day.

>

> Arden Allen

> KB6NAX

>

> If you get to thinking you're a person of

> some influence, try ordering somebody

> else's dog around. -Will Rogers

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From arc5 at ix.netcom.com Sun Feb 24 11:36:33 2013

From: arc5 at ix.netcom.com (David Stinson)

Date: Sun, 24 Feb 2013 10:36:33 -0600

Subject: [BoatAnchors] selling equipment: an OPINION

In-Reply-To: <20130224153302.AWW33.16313.root@cdptpa-web21-z02>

References: <20130224153302.AWW33.16313.root@cdptpa-web21-z02>

Message-ID: <7984D2818C8046488B67DE011DBEB4CB@CompaqSR5710F>

----- Original Message -----

From: <wb3fau55 at neo.rr.com>

> All well said Arden, I have been buying/selling BAs for many years. As

> you all well know,

> places like [Eprey] have ruined a good amount of the fun/fair pricing

> of our favorite  
> BA stuff. Most sellers now-a-days, are not real concerned about your  
> needs, they just  
> want your cash.

Oh for Pity's sweet sake.....

(shut up, David.... shut up, David.... shut UP,  
David!)

From WA5CAB at cs.com Sun Feb 24 12:05:27 2013  
From: WA5CAB at cs.com (WA5CAB at cs.com)  
Date: Sun, 24 Feb 2013 12:05:27 -0500 (EST)  
Subject: [BoatAnchors] selling equipment: an OPINION  
Message-ID: <44d7.3005b2eb.3e5ba257@cs.com>

What comments (complaints) like this always ignore is that 20 years ago and more, virtually all of the items being offered by these denigrated sellers would have gone for scrap or to a landfill.

Robert D.

In a message dated 02/24/2013 09:33:28 AM Central Standard Time, wb3fau55 at neo.rr.com writes:  
> All well said Arden, I have been buying/selling BAs for many years. As  
> you all well know,  
> places like [Eprey] have ruined a good amount of the fun/fair pricing  
> of our favorite  
> BA stuff. Most sellers now-a-days, are not real concerned about your  
> needs, they just  
> want your cash. What you could buy, 20 years ago for \$25, now is  
> netting \$100s. It has  
> more to do with current popularity of a particular item. Deals can be  
> made at smaller  
> hamfests, you have to be a good hunter...73 Russ.  
> ---- Arden Allen <gumbear at pacbell.net> wrote:  
> >>.....I won the receiver, &the other bidder won the power supply.  
> .....  
> >  
> >Most of the sellers on eSwamp are junque purveyors and not very sensitive  
> to the needs or wants of buyers. I once tried to argue a seller into  
> selling me a whole piece of equipment instead of parting it out - to no avail.  
> Another was happy to just move a piece of gear down the road having  
> thought it would be more attractive in pieces. The lesson is, NEGOTIATE. E-mail  
> the seller and plead your case. Induce a sympathetic response if possible

> along with a proposition like, "how much do you want to get for both  
> pieces and add to your listings "make offer" and sell to me" (if the seller  
> wants to pull the listing and sell to you direct without going through eBay that  
> will be his problem, not yours). Of course some sellers are just  
> boneheads and can't figure their way out of a wet paper bag. Some are corporate  
> mentality types that have to ask permission to go to the bathroom. In most  
> cases negotiation has worked for me. The cardinal rule is, "money talks, BS  
> walks." Fairne  
> ss  
> > is in the eyes of the buyer in most cases but don't let that ruin your  
> day.  
> >  
> >Arden Allen  
> >KB6NAX

From WA1KBQ at aol.com Sun Feb 24 12:25:50 2013  
From: WA1KBQ at aol.com (WA1KBQ at aol.com)  
Date: Sun, 24 Feb 2013 12:25:50 -0500 (EST)  
Subject: [BoatAnchors] selling equipment: an OPINION  
Message-ID: <1df38.56196e76.3e5ba71e@aol.com>

Not all that long ago many hamfest and swap sellers began routinely pricing tailgate equipment much higher and more in line with the then skyrocketing ebay selling prices. That strategy is changing, however, and may now favor buyers after ebay began driving sellers away in droves with a barrage of policy changes which shifted the advantage to buyers and resulted in a significant drop in average selling prices.

Regards, Greg

In a message dated 2/24/2013 11:37:30 A.M. Eastern Standard Time, arc5 at ix.netcom.com writes:

----- Original Message -----  
From: <wb3fau55 at neo.rr.com>

> All well said Arden, I have been buying/selling BAs for many years.  
As  
> you all well know,  
> places like [Eprey] have ruined a good amount of the fun/fair  
pricing  
> of our favorite  
> BA stuff. Most sellers now-a-days, are not real concerned about your  
> needs, they just

> want your cash.

Oh for Pity's sweet sake.....

(shut up, David.... shut up, David.... shut UP,  
David!)

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From knjhanlon at msn.com Tue Feb 26 17:19:48 2013  
From: knjhanlon at msn.com (JAMES HANLON)  
Date: Tue, 26 Feb 2013 15:19:48 -0700  
Subject: [BoatAnchors] Meter Repair  
Message-ID: <BLU160-W485D7460AEC0C4012A31BEA0FC0@phx.gbl>

I need some meter repair service for an S-meter from an RA0-2. Any suggestions?

Thanks,

Jim, W8KGI

From john.shriver at gmail.com Tue Feb 26 19:13:27 2013  
From: john.shriver at gmail.com (John Shriver)  
Date: Tue, 26 Feb 2013 19:13:27 -0500  
Subject: [BoatAnchors] Meter Repair  
In-Reply-To: <BLU160-W485D7460AEC0C4012A31BEA0FC0@phx.gbl>  
References: <BLU160-W485D7460AEC0C4012A31BEA0FC0@phx.gbl>  
Message-ID: <AA57B012-2A1F-4632-B7F9-499B0F0D3972@gmail.com>

Standard Meter Lab. <http://www.sml-inc.com>

Recognize that their prices are aligned with the retail values of calibrated test equipment. But for the difficulty of the work, they are reasonable.

But if anyone can fix a meter, they can.

On Feb 26, 2013, at 5:19 PM, JAMES HANLON <knjhanlon at msn.com> wrote:

> I need some meter repair service for an S-meter from an RA0-2. Any suggestions?  
>  
> Thanks,  
>  
> Jim, W8KGI



> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From WA1KBQ at aol.com Tue Feb 26 21:21:26 2013  
From: WA1KBQ at aol.com (WA1KBQ at aol.com)  
Date: Tue, 26 Feb 2013 21:21:26 -0500 (EST)  
Subject: [BoatAnchors] Meter Repair  
Message-ID: <3c2d5.59fa7cb9.3e5ec7a6@aol.com>

Jim,

Your s-meter might be a 0-1ma made by Marion. I have successfully swapped meter movements from another 0-1ma meter from the same maker.

Regards, Greg

In a message dated 2/26/2013 5:20:16 P.M. Eastern Standard Time, knjhanlon at msn.com writes:

I need some meter repair service for an S-meter from an RA0-2. Any suggestions?

Thanks,

Jim, W8KGI

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From gumbear at pacbell.net Tue Feb 26 22:48:15 2013  
From: gumbear at pacbell.net (Arden Allen)  
Date: Tue, 26 Feb 2013 19:48:15 -0800  
Subject: [BoatAnchors] Meter Repair  
References: <BLU160-W485D7460AEC0C4012A31BEA0FC0@phx.gbl>  
Message-ID: <005601ce14af\$d3203a20\$4301a8c0@KB6NAX>

Larson Metercraft rebuilt a vintage Simpson meter for me. They repair the oldies. Cost reasonable.

[http://larsonmetercraft.com/contact\\_information.htm](http://larsonmetercraft.com/contact_information.htm)

Arden Allen  
KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

----- Original Message -----

From: JAMES HANLON  
To: boatanchors  
Sent: Tuesday, February 26, 2013 2:19 PM  
Subject: [BoatAnchors] Meter Repair

I need some meter repair service for an S-meter from an RAO-2. Any suggestions?

Thanks,

Jim, W8KGI

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From k4wgd47 at gmail.com Wed Feb 27 18:09:53 2013  
From: k4wgd47 at gmail.com (WG)  
Date: Wed, 27 Feb 2013 18:09:53 -0500  
Subject: [BoatAnchors] R 390/A cabinets  
In-Reply-To: <03e101ce113b\$7b4364c0\$71ca2e40\$@rr.com>  
References: <03e101ce113b\$7b4364c0\$71ca2e40\$@rr.com>  
Message-ID: <6.2.3.4.2.20130227180655.0b855a50@pop.gmail.com>

Hi Guys,  
Some food for thought..

Saw this today. Brand NEW R390A cabinets from Fair Radio  
Sales, Lima Ohio \$180 + SH ..only 8 left..

[http://www.ebay.com/itm/HAMMOND-R-390A-RECEIVER-RACK-CABINET-R-388-R-390-NEW-SP-600-COLLINS-HAMMARLUND-/190794429054?pt=US\\_Ham\\_Radio\\_Receivers&hash=item2c6c3bf27e](http://www.ebay.com/itm/HAMMOND-R-390A-RECEIVER-RACK-CABINET-R-388-R-390-NEW-SP-600-COLLINS-HAMMARLUND-/190794429054?pt=US_Ham_Radio_Receivers&hash=item2c6c3bf27e)

\*\*\*\*\*

\*\*\*\*\*

At 03:30 PM 2/22/2013, you wrote:

>It appears that there are 43 brand new in boxes R 390/A cabinets available.  
>I don't know the price yet, but \$500 ish was mentioned on my last  
>communication. These are all gray with the shock mounts and sled feet. Let  
>me know ASAP if you want one or more and I will try to get a final price  
>before committing anything!

>

>

>

>Rich Baldwin

>

>KD6VK

>

>

>-----  
>BoatAnchors mailing list

>BoatAnchors at theporch.com

><https://minime.theporch.com/mailman/listinfo/boatanchors>

From wb0eq at yahoo.com Wed Feb 27 18:28:37 2013

From: wb0eq at yahoo.com (John Sehring)

Date: Wed, 27 Feb 2013 15:28:37 -0800 (PST)

Subject: [BoatAnchors] More sell/not sell decisions...

Message-ID: <1362007717.44005.YahooMailNeo@web161003.mail.bf1.yahoo.com>

Thanks to all who clarified my thinking about stuff to keep & not.

For further consideration & decision:

1. ?General Radio 1001-A RF signal generator. ?In beautiful condition inside & out. ?There's not even any dust inside of it looks just as the day it was assembled. ?Gorgeous contruction, costmetically, electronically & mechanically. ? Could easily be MIL-spec. ?Very wide range coverage, 5 kHz to 50 MHz! ?But, it's big & heavy.

2. ?URM-25D. ?Quite a bit smaller but seems capable of doing same as above. ?Is MIL-spec. ?Also in excellent condition. ?I have two of them (don't ask how).

Pro's/con's? ?I value your opinions very much. ?Once again, I am amazed at the wide range of experience on this list & you willingness to share that.

The collection of equip. to go is building up. ?Puyallup, here I come, ready or not!

?

--John Sehring ?WB0EQ-VE6EQR ? nr Calgary, Alberta, Canada

From spr at earthlink.net Wed Feb 27 19:11:38 2013  
From: spr at earthlink.net (spr at earthlink.net)  
Date: Wed, 27 Feb 2013 16:11:38 -0800 (GMT-08:00)  
Subject: [BoatAnchors] More sell/not sell decisions...  
Message-ID: <100529.1362010299034.JavaMail.root@elwamui-cypress.atl.sa.earthlink.net>

HI John,

I have no experience with the URM-25D. You might want to look at the schematic to see if it's a modulated oscillator or not. If it is, it will have enough incidental FM to make aligning selective receivers a bit troublesome. The GenRad has a modulated buffer after the oscillator, so the incidental FM should be less.

GenRad stuff is beautifully built and hard to part with.

My bench features a Boonton 107D modern (1980s) generator that can lock to a crystal and has pretty much no incidental anything, except a noisy output attenuator pot. 'Tain't a classic like the three boxed you have, but it lets me align things really nicely. I also have a much older generator for those radios with low (below 150 KHz) IF's.

Regards,

Scott

-----Original Message-----

>From: John Sehring <wb0eq at yahoo.com>

>Sent: Feb 27, 2013 3:28 PM

>To: Boatanchors List <boatanchors at theporch.com>

>Subject: [BoatAnchors] More sell/not sell decisions...

>

>Thanks to all who clarified my thinking about stuff to keep & not.

>

>For further consideration & decision:

>

>1. ?General Radio 1001-A RF signal generator. ?In beautiful condition inside & out. ?There's not even any dust inside of it looks just as the day it was assembled. ?Gorgeous contruction, costmetically, electronically & mechanically. ? Could easily be MIL-spec. ?Very wide range coverage, 5 kHz to 50 MHz! ?But, it's big & heavy.

>  
>2. ?URM-25D. ?Quite a bit smaller but seems capable of doing same as above. ?Is MIL-spec. ?Also in excellent condition. ?I have two of them (don't ask how).  
>  
>Pro's/con's? ?I value your opinions very much. ?Once again, I am amazed at the wide range of experience on this list & you willingness to share that.  
>  
>The collection of equip. to go is building up. ?Puyallup, here I come, ready or not!  
>?  
>--John Sehring ?WB0EQ-VE6EQR ? nr Calgary, Alberta, Canada  
>-----  
>BoatAnchors mailing list  
>BoatAnchors at theporch.com  
><https://minime.theporch.com/mailman/listinfo/boatanchors>

From ark at ar88.net Wed Feb 27 19:27:18 2013  
From: ark at ar88.net (Al Klase)  
Date: Wed, 27 Feb 2013 19:27:18 -0500  
Subject: [BoatAnchors] More sell/not sell decisions...  
In-Reply-To: <1362007717.44005.YahooMailNeo@web161003.mail.bf1.yahoo.com>  
References: <1362007717.44005.YahooMailNeo@web161003.mail.bf1.yahoo.com>  
Message-ID: <512EA466.3020501@ar88.net>

On 2/27/2013 6:28 PM, John Sehring wrote:

> ....For further consideration & decision:

>  
> 1. General Radio 1001-A RF signal generator. In beautiful condition inside & out. There's not even any dust inside of it looks just as the day it was assembled. Gorgeous contruction, costmetically, electronically & mechanically. Could easily be MIL-spec. Very wide range coverage, 5 kHz to 50 MHz! But, it's big & heavy.

This is a so-called Standard Signal Generator. It is a laboratory-grade instrument, and was used to develop a lot of the classic electronics of the WWII era. To answer Scott's question, it is a proper master-oscillator / modulated-amplifier circuit. My problem is that it doesn't pass the pick-it-up-with-one-hand test.

General Radio equipment is a disease. It's so pretty you don't want to part with it. Even some of the basically useless stuff is too pretty to take apart for components.

>  
> 2. URM-25D. Quite a bit smaller but seems capable of doing same as above. Is MIL-spec. Also in excellent condition. I have two of them (don't ask how).  
>  
> Pro's/con's? I value your opinions very much.

The URM-25 is basically a post-war miniaturized 1001-A. My only objection is that the dial is hard on old eyes.

My two cents,  
Al

> Once again, I am amazed at the wide range of experience on this list & your willingness to share that.

>

> The collection of equip. to go is building up. Puyallup, here I come, ready or not!

>

> --John Sehring WB0EQ-VE6EQR nr Calgary, Alberta, Canada

>

> -----

>

--

Al Klase - N3FRQ

Jersey City, NJ

<http://www.skywaves.ar88.net/>

From gumbear at pacbell.net Wed Feb 27 20:32:04 2013

From: gumbear at pacbell.net (Arden Allen)

Date: Wed, 27 Feb 2013 17:32:04 -0800

Subject: [BoatAnchors] More sell/not sell decisions...

References: <100529.1362010299034.JavaMail.root@elwamui-cypress.atl.sa.earthlink.net>

Message-ID: <003301ce1553\$6e3c7d90\$4301a8c0@KB6NAX>

> I have no experience with the URM-25D. You might want to look at the schematic to see if it's a modulated oscillator or not. If it is, it will have enough incidental FM to make aligning selective receivers a bit troublesome. The GenRad has a modulated buffer after the oscillator, so the incidental FM should be less.

Scott, the URM-25 series, you might say, is a more compact militarized version of the GR 1001A, of which I have one of each. Same circuit topologies, oscillator - modulated output amplifier. The GR outputs with a 1614 (hum controlled 6L6) and the '25 with a 6AG7. In addition the '25's go down to 10kHz. Even though the output stage is modulated there is some amount of FM-ing noticeable at the high frequencies. But both are very adequate for AM receiver servicing. The advantage of the GR is it was built only by GR and is practically drift free by comparison to the '25's which were built by a number of contractors for Uncle with varying degrees of quality. Just turn your '25 on before breakfast and when you're ready to go to work it stays put until you change bands and then you have to wait a

while for it to settle if you are fussy about absolute frequency accuracy. Connect a counter to the high voltage output on either generator and you're in business.

Arden Allen  
KB6NAX

The average dog is a nicer person than  
the average person. -Andy Rooney

From k1lky at earthlink.net Wed Feb 27 20:40:47 2013  
From: k1lky at earthlink.net (Roy Morgan)  
Date: Wed, 27 Feb 2013 20:40:47 -0500  
Subject: [BoatAnchors] More sell/not sell decisions...  
In-Reply-To: <1362007717.44005.YahooMailNeo@web161003.mail.bf1.yahoo.com>  
References: <1362007717.44005.YahooMailNeo@web161003.mail.bf1.yahoo.com>  
Message-ID: <C0D3EB95-A1DD-4FD1-8B21-CAC7AEE01526@earthlink.net>

- > 1. General Radio 1001-A RF signal generator.
- > 2. URM-25D.
- > Pro's/con's?

John,

The GR 1001A is easier to use, but the URM-25 is actually a bit more capable (I think, without comparing them side by side). For instance, I think the modulation tones are not available on the 1001A panel - not sure

The 1001A leaks more than the URM, so if VERY small signal levels are needed, such as testing sensitivity of R-390A's or more modern and sensitive receivers, use the URM, but actually neither one is best - you need a more modern HP generator.

The 1001A has some quirks about the output impedance: it is not 50 ohms without an external series resistance (not hard to make, or find) except on one output attenuator range. Must read manual to get this straight.

The URM MAY have been "transmitted into" in which case the attenuator wee odd-valued resistors may be toasted, and need to be replaced. (Just measure with an ohm meter at the output jack the DC resistance for each setting of the attenuator switch. Find the correct values on the web, or email me.) Same is true of the 1001A, but the variable attenuator is more robust, though much more difficult to find a replacement for.

The URM may need some capacitors replaced to get the modulation to run right. A complete overhaul is more complicated than on the 1001A. Dallas Lankford wrote a fine 11 page overhaul document many years ago.

The 1001A is easier to set for calibrated output level and frequency.

Both are about equally demanding in the process of aligning the frequency dial, but once done each will hold for a long time.

Both will run and run and run (if any needed caps or resistors are replaced.)

My opinion? Any good test bench should have both. heheh. (Just build a

Roy

PS: For avid 1001A lovers, I have a copy of the multi-page factory alignment procedure, and after a while I could make copies for those who want/need it.

Roy Morgan  
k1lky at earthlink.net  
K1LKY Since 1958 - Keep 'em Glowing!

From ebjr37 at charter.net Wed Feb 27 21:13:41 2013  
From: ebjr37 at charter.net (Sandy Blaize)  
Date: Wed, 27 Feb 2013 20:13:41 -0600  
Subject: [BoatAnchors] More sell/not sell decisions...  
In-Reply-To: <003301ce1553\$6e3c7d90\$4301a8c0@KB6NAX>  
References: <100529.1362010299034.JavaMail.root@elwamui-cypress.atl.sa.earthlink.net>  
<003301ce1553\$6e3c7d90\$4301a8c0@KB6NAX>  
Message-ID: <DE51B8A515424D5AB8F4F2761C5D3125@SandysLaptop>

I had a URM-25D for a long time. Generally it was "OK" but a little drifty at times, but not really excessive like some of the "kit stuff". I gave up the URM-25 somewhat reluctantly after I got a nice G-R 1001A! What a nice piece of gear. The only BIG problem is you have to have (or you BETTER GET!) some of the 874 unisex connectors! I even have a "binding post to 874" adapter that G-R makes.

After using the various RF impedance meters (MFJ analyzer, Autek, GR RF



Bridge), even though it is BIG and bulky, I like the G-R RF bridge the best. I like the Autek Vector analyzer, VA-1 because it gives  $R + jX$  or  $R - jX$  for series or parallel configuration. Very small and handy. BIG problem is setting the generator is sometimes very touchy!

Eventually I plan on getting rid of the G-R bridge as I never use it anymore.

73,  
Sandy W5TVW

-----Original Message-----

From: Arden Allen

Sent: Wednesday, February 27, 2013 7:32 PM

To: spr at earthlink.net ; John Sehring ; Boatanchors List

Subject: Re: [BoatAnchors] More sell/not sell decisions...

> I have no experience with the URM-25D. You might want to look at the schematic to see if it's a modulated oscillator or not. If it is, it will have enough incidental FM to make aligning selective receivers a bit troublesome. The GenRad has a modulated buffer after the oscillator, so the incidental FM should be less.

Scott, the URM-25 series, you might say, is a more compact militarized version of the GR 1001A, of which I have one of each. Same circuit topologies, oscillator - modulated output amplifier. The GR outputs with a 1614 (hum controlled 6L6) and the '25 with a 6AG7. In addition the '25's go down to 10kHz. Even though the output stage is modulated there is some amount of FM-ing noticeable at the high frequencies. But both are very adequate for AM receiver servicing. The advantage of the GR is it was built only by GR and is practically drift free by comparison to the '25's which were built by a number of contractors for Uncle with varying degrees of quality. Just turn your '25 on before breakfast and when you're ready to go to work it stays put until you change bands and then you have to wait a while for it to settle if you are fussy about absolute frequency accuracy. Connect a counter to the high voltage output on either generator and you're in business.

Arden Allen  
KB6NAX

The average dog is a nicer person than  
the average person. -Andy Rooney

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

-----

No virus found in this message.

Checked by AVG - [www.avg.com](http://www.avg.com)

Version: 2013.0.2899 / Virus Database: 2641/6136 - Release Date: 02/27/13

From beckrep at citlink.net Thu Feb 28 00:40:47 2013

From: beckrep at citlink.net (Paul Beckwith)

Date: Wed, 27 Feb 2013 22:40:47 -0700

Subject: [BoatAnchors] R 390/A cabinets

In-Reply-To: <6.2.3.4.2.20130227180655.0b855a50@pop.gmail.com>

References: <03e101ce113b\$7b4364c0\$71ca2e40\$@rr.com>

<6.2.3.4.2.20130227180655.0b855a50@pop.gmail.com>

Message-ID: <2c771f\$b5top@out01.dlts.pa.frontiernet.net>

Thanks for the post, Richard!

I just ordered one. There are seven left.

73's de Paul K2LMQ Kingman, AZ

At 04:09 PM 2/27/2013, WG wrote:

> Hi Guys,

> Some food for thought..

>

> Saw this today. Brand NEW R390A cabinets from Fair Radio

> Sales, Lima Ohio \$180 + SH ..only 8 left..

>

>[http://www.ebay.com/itm/HAMMOND-R-390A-RECEIVER-RACK-CABINET-R-388-R-390-NEW-SP-600-COLLINS-HAMMARLUND-/190794429054?](http://www.ebay.com/itm/HAMMOND-R-390A-RECEIVER-RACK-CABINET-R-388-R-390-NEW-SP-600-COLLINS-HAMMARLUND-/190794429054?pt=US_Ham_Radio_Receivers&hash=item2c6c3bf27e)

pt=US\_Ham\_Radio\_Receivers&hash=item2c6c3bf27e

>